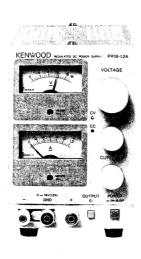


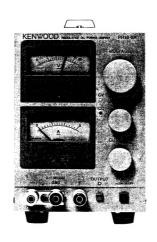
REGULATED DC POWER SUPPLY

# PR18-1.2A PR18-3A PR18-5A PR36-1.2A PR36-3A PR70-1A

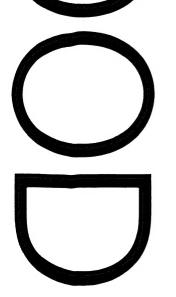
# SERVICE MANUAL

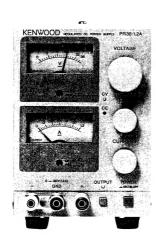
KENWOOD CORPORATION

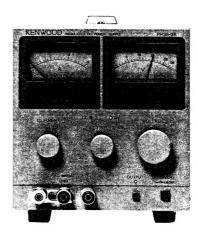


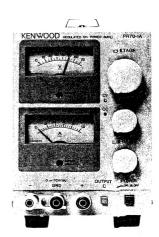












### **ADJUSTMENT**

- To obtain the best performance, periodically calibrate the unit. Sometimes, only one mode need be calibrated, while at other times, all modes should be calibrated. When one mode is calibrated, it must be noted that the other modes may be affected. When calibrating all modes, perform the calibration in the specified sequence.
- The following calibration required an accurate measuring instrument and an insulated adjusting flat blade screwdriver. If they are not available, contact your dealer. For optimum adjustment, turn the power on and warm up the scope sufficiently (more than 30 minutes) before starting.

Before calibrating the scope, check the power supply voltage.

#### **TEST EQUIPMENT REQUIRED**

The following instrument or their equivalent should be used for making adjustment.

Multimeter 45 FLUKE

#### PREPARATION FOR ADJUSTMENT

#### **Control Settings**

The control settings listed below must be used for each adjustment procedure.

Exceptions to these settings will be noted as they occur. After completing a adjustment, return the controls to the following settings.

NAME OF KNOBS	POSITION
CURRENT FINE VOLTAGE	Fully Clockwise

Item	Adjustment VR	Procedure	
Voltage	VR1 (V. ADJ)	Turn VR1 clockwise to adjust the to the output voltage setting, then turn the FINE control to adjust to the rated voltage. (Before this adjustment, set VR1 to VR3 to the fully counterclockwise positions.)	Table 1.
Current	VR2 (A. ADJ)	Connect a load and turn VR2 to adjust to the output current setting.	\$
A meter	VR3 (AM. CAL)	Set the load for the rated current, and adjust the swing of the ammeter of the main unit with VR3.	Refer

Specifica- tions	Output voltage setting	Output current setting
Model	[V]	[A]
PR18-1.2A		1.28
PR18-3A	18.5	3.19
PR18-5A		5.3
PR36-1.2A	07	1.28
PR36-3A	37	3.19
PR70-1A	72	1.06

Table 1

#### PR18-1.2A

### Y86-1850-00

REF. NO	PARTS NO A01-1236-08	NAME & DESCRIPTION COVER
	A63-0112-08	FRONT PANEL
	B31-0755-08	METER; VOLT
	B31-0756-08	METER; CURRENT
	B 4 0 - 2 7 3 7 - 2 4 B 4 2 - 3 7 3 1 - 0 8	SERIAL NO. PLATE NASTER/SLAVE LABEL
	B42-3731-08	RATING; AC100V 50/60HZ 45W
	B 4 2 - 3 7 3 5 - 0 8	FUSE RATING LABEL
	B 4 2 - 3 7 4 9 - 0 8	RATING: AC120V 50/60HZ 45W
	B 4 2 - 3 7 5 0 - 0 8 B 4 2 - 3 7 5 1 - 0 8	RATING; AC220V 50/60HZ 45W RATING; AC240V 50/60HZ 45W
	8 4 2 - 3 7 5 2 - 0 8	RATING; AC120V 60HZ 45W
	B 6 3 - 0 1 7 3 - 0 0	INSTRUCTION MANUAL; JAPANESE
	B63-0174-00 E21-0670-03	INSTRUCTION MANUAL; ENGLISH TERMINAL, RED
	E21-0671-03	TERMINAL, BLACK
	E 2 1 - 0 6 7 2 - 0 3	TERMINAL, WHITE
	E 29 - 05 06 - 04	SHORTING BAR
	E 29 - 0542 - 08 E 30 - 0027 - 35	LUG; H3 UL/CSA POWER CORD
	E30-0545-05	JIS POWER CORD
	E 3 0 - 0 5 7 1 - 1 5	SAA POWER CORD
	E30-1815-05 E30-1867-05	CEE POWER CORD BS POWER CORD
	F01-0884-08	HEAT SINK
	F 0 5 - 8 0 1 3 - 0 8	FUSE (5 X 2 0 M M) 0.8 A / 25 0 V
	F 0 5 - 8 0 1 5 - 0 8	FUSE(6X32NN) 0.84/250V
	F29-0515-08 F51-0007-08	INSULATOR: FOR Q6 FUSE 1.5A/125V
	11 1 0 - 2 8 5 3 - 0 8	FOAMED STYRENE PAD (FRONT)
	11 1 0 - 2 8 5 4 - 0 8	FOAMED STYRENE PAD (REAR)
	H 1 0 - 2 8 5 5 - 0 8 H 1 0 - 2 8 5 8 - 0 8	STYRENE PAD;83X115X30MM STYRENE PAD;154X205X30MM
	11 2 0 - 1 7 3 4 - 0 8	VINYL COVER
	B 5 3 - 0 1 1 1 - 0 8	CARTON BOX
	J 0 2 - 0 5 2 9 - 0 8 J 1 9 - 1 6 7 1 - 0 8	FOOT CLAMPER; FOR 2-CORE AC CORD
	J19-1672-08	CLAMPER: FOR 3-CORE AC CORD
	J21-4720-08	BRACKET; FOR P.C.B
	J21-4758-08	BRACKET; FOR AC CORD BUSHING
	J 3 0 - 0 6 3 5 - 0 8 J 4 2 - 0 0 8 3 - 0 5	VOLUME SPACER; FOR VRO1 BUSHING; FOR 2-CORE AC CORD
	J 4 2 - 0 0 8 5 - 0 5	BUSHING; FOR 3-CORE AC CORD
	K 21 - 0907 - 14	KNOB
	K 2 1 - 0 9 1 1 - 0 4 K 2 4 - 3 0 0 6 - 0 4	KNOB; FINE/CURRENT KNOB, OUTPUT
	K 2 7 - 0 5 0 9 - 0 4	PUSH BUTTON, ORANGE; POWER
	1.07-1516-08	POWER TRANSFORMER
	N 0 9 - 0 7 1 8 - 0 5 N 0 9 - 0 7 2 0 - 0 5	SCREW, SEMS PAN HD M3X6 SCREW, SEMS PAN HD M4X10
	N 0 9 - 0 7 5 7 - 0 5	SCREW, SENS BINDING TAPTITE 3X6
	N 0 9 - 0 7 8 9 - 0 5	SCREW, SEMS PAN HD M3X10
	N 0 9 - 0 7 9 7 - 0 8	SCREW, SEMS TAPTITE 3X10
	N 1 4 - 0 4 0 4 - 0 4 N 8 9 - 3 0 0 6 - 4 1	FLANGE NUT M3 SCREW, BINDING TAPTITE 3X6
	N 8 9 - 3 0 1 0 - 4 1	SCREW, BINDING TAPTITE 3X10
	S 4 0 - 2 5 3 3 - 0 8	PUSH SWITCH: POWER
V R O 1	W 0 2 - 2 2 6 7 - 0 8 R 2 9 - 3 5 0 3 - 0 8	AMP UNIT VOLUME 10K
V R O 2	R39-0800-08	VOLUME 1K
VROS	R 2 9 - 3 5 0 4 - 0 8	VOLUME 10K

#### PR18-1.2A AMP UNIT

		02-2267-08
REF. NO	PARTS NO E21-0674-08 E40-7141-08 E40-7142-08 J13-0518-08	NAME & DESCRIPTION EXTERNAL OUTPUT TERMINAL PIN CONNECTOR 2P(LINE VOLTAGE) PIN CONNECTOR 1P(LINE VOLTAGE) FUSE CLIP; FOR 6X30MM
C 1 C 2 C 3 C 4	J 7 3 - 0 3 2 6 - 0 8 R 9 2 - 0 1 5 0 - 0 5 R 9 2 - 1 0 6 1 - 0 5 C 9 0 - 3 0 2 3 - 0 8 C Q 9 2 N 1 H 0 2 K C 9 1 - 2 5 5 9 - 0 8 C Q 9 2 N 1 H 4 7 2 K	PCB (UNNOUNTED) JUMPING RES. ZERO OHM (10MM) JUMPING RES. ZERO OHM (5MM) CAP. ELECTRO 470 105 C 35V CAP. MYLAR 1000P 10% 50V CAP. CERAMIC 0.1 0.25P 50V CAP. MYLAR 4700P 10% 50V
C 5 C 6 C 7 C 8	C Q 9 2 M 1 II 1 0 3 K N 0 U S E C 9 0 - 3 0 2 0 - 0 8 C F 9 3 A N 2 E R 2 2 K	CAP. MYLAR 0.01, 10% 50V  CAP. ELECTRO 100 105°C 25V  CAP. POLYESTER 0.22P 10% 250
C 9 C 1 0 C 1 1	NO USE C90-3021-08 CF93ANIJR22K	CAP. ELECTRO 2200 105°C 35V CAP. POLYESTER 0.22P 10% 63V
C 2 2	C 9 t - 2 5 5 9 - 0 8	CAP. CERAMIC 0.1 0.25 P 50 V
C 2 6	C 9 0 - 3 1 7 4 - 0 8	CAP. ELECTRO 10 1% 50V
C 2 7 C 2 8 C 2 9	NO USE C90-3020-08 C91-2559-08	CAP. ELECTRO 100 105°C 25V CAP. CERAMIC 0.1 0.25 P 50V
C 3 2	C F 9 3 A N 1 J 1 R 0 K	CAP. POLYESTER IP 10% 63V
C N 1 C N 2 C N 3	E 4 0 - 7 2 1 8 - 0 8 E 4 0 - 7 3 4 4 - 0 8 N O USE	PIN CONNECTOR 2P PIN CONNECTOR 3P
C N 4 C N 5 C N 6	E 4 0 - 7 1 2 6 - 0 8 E 4 0 - 7 2 1 9 - 0 8 NO USE	PIN CONNECTOR 2P PIN CONNECTOR 3P
CN7	E 10 - 7229-08	PIN CONNECTOR 4P
C N 1 1 C N 1 2 C N 1 3	E 4 0 - 7 3 3 2 - 0 8 E 4 0 - 7 3 3 3 - 0 8 E 4 0 - 7 3 3 3 - 0 8	PIN CONNECTOR 4P PIN CONNECTOR 2P PIN CONNECTOR 2P
C N 1 8	E 4 0 - 7 4 4 0 - 0 8	CONNECTOR
C N 2 3 C N 2 4	E 4 0 - 3 2 4 0 - 0 5 E 4 0 - 7 3 3 3 - 0 8	PIN CONNECTOR 5P PIN CONNECTOR 2P
C 0 1	C 9 0 - 3 0 1 8 - 0 8	CAP. ELECTRO 1 105 C 50 V
C 0 1	C 9 1 - 1 3 2 3 - 0 8	CAP. CERAMIC 0.1 20 % 250
C 0 2 C 0 3	NO USE C90-3046-08	CAP. ELECTRO 100 105 C 50V
D 1 D 2 D 3 D 4 D 5 D 6 D 7 D 8 D 9	1 B 4 B 4 2 E R A 1 5 - 0 1 1 S S 2 7 0 A 1 S S 2 7 0 A 1 S S 2 7 0 A 1 S S 2 7 0 A 1 S S 2 7 0 A 1 S S 2 7 0 A 1 S S 2 7 0 A N O USE D 3 S B 6 0	DIODE, STACK DIODE DIODE DIODE DIODE DIODE DIODE DIODE DIODE
D 15	1 S S 2 7 0 A 1 S S 2 7 0 A	DIODE DIODE
D 1 6	1 S S 2 7 0 Å	DIODE
D 2 8 D 3 3 D 3 4	ERA15-01 1SS270A	DIODE DIODE
D37 D38 D39	ERA15-01 1SS270A ERA15-01	D I O D E D I O D E
D 0 1	ERA15-01	DIODE
1 C 1 1 C 2 1 C 3	UPC151C UPC151C UPC1093J	IC, OP AMP IC, OP AMP IC, V'ARIABLE SHUNT REGULA TOR
1 C 9	N A 1 7 8 L 1 2 A	IC, TERMINAL FIXED VOLTAGE REG.
LEDI	1. N 2 2 2 R P 1. N 3 2 2 G P	LED; RED LED; GREEN
L E D O 1	I. N 2 2 2 R P	I. E D : R E D
Q 1 Q 2 Q 3	2 S C 1 8 1 5 ( G R ) 2 S C 1 8 1 5 ( G R ) 2 S C 1 8 1 5 ( G R ) 2 S C 1 8 1 5 ( G R )	TR. SI, NPN TR. SI, NPN TR. SI, NPN TR. SI, NPN

R E F . N O Q 5 Q 6 Q 7	PARTS NO 2 SC 1 8 1 5 (GR) 2 SD 1 1 4 8 (O) NO USE	NAME & DESCRIPTION TR. SI, NPN TR. SI, NPN
Q 8	2 S C 3 4 2 1 ( Y )	TR. SI, NPN
Q 1 5 Q 1 6 Q 1 7	2 SC 1 8 1 5 ( G R ) NO U S E D T A 1 4 3 E F	TR. ŚI, NPN TR. DIGITAL
R 1 R 2	R D I 4 B B 2 C 1 2 2 J R D I 4 B B 2 C 1 2 3 J	RES. CARBON 1.2K 5% 1/6W RES. CARBON 12K 5% 1/6W
R 2 R 3 R 4 R 5 R 6 R 7 R 8 R 9 R I 0 R I 1 R 1 2	R D I 4 D B 2 H 3 O 2 J R D I 4 B B 2 C 3 O 2 J R D I 4 B B 2 C 5 I O J R D I 4 B B 2 C 6 8 2 J R D I 4 B B 2 C 2 7 3 J R D I 4 B B 2 C 2 7 3 J R D I 4 B B 2 C 2 D 2 J R D I 4 B B 2 C 2 D 2 J R D I 4 B B 2 C C 1 O 2 J R D I 4 B B 2 C 5 I 3 J R D I 4 B B 2 C 5 I 3 J NO U S E	RES. CARBON 3K 5% 1/2W RES. CARBON 3K 5% 1/6W RES. CARBON 51 5% 1/6W RES. CARBON 6.8K 5% 1/6W RES. CARBON 27K 5% 1/6W RES. CARBON 27K 5% 1/6W RES. CARBON 2 K 5% 1/6W RES. CARBON 1 K 5% 1/6W RES. CARBON 1 K 5% 1/6W RES. CARBON 5 1 K 5% 1/6W RES. CARBON 5 1 K 5% 1/6W
R 1 3 R 1 4 R 1 5 R 1 6 R 1 7	R DI 4 BB 2 C 2 O 2 J R DI 4 BB 2 C 1 5 2 J R DI 4 BB 2 C 5 I I J R DI 4 BB 2 C 5 I 2 J NO USE	RES. CARBON 2K 5% 1/6W RES. CARBON 1.5K 5% 1/6W RES. CARBON 510 5% 1/6W RES. CARBON 5.1K 5% 1/6W
R 1 8 R 1 9 R 2 0 R 2 1 R 2 2 R 2 3 R 2 4	R D1 4 B B 2 C 5 1 3 J R D1 4 B B 2 C 1 0 3 J R D1 4 B B 2 C 1 0 2 J R D1 4 B B 2 C 1 6 0 3 F R D1 4 B B 2 C 1 0 2 J R M1 4 B K 2 C 1 0 0 2 J R M1 4 B K 2 C 9 1 0 1 F R M1 4 B K 2 C 3 0 0 1 F	RES. CARBON 51K 5% 1/6W RES. CARBON 10K 5% 1/6W RES. CARBON 1K 5% 1/6W RES. METAL FILM 160K 1% 1/6W RES. CARBON 1K 5% 1/6W RES. METAL FILM 9.1K 1% 1/6W RES. METAL FILM 3K 1% 1/6W
R 2 7 R 2 8 R 2 9	R D1 4 B B 2 C 1 O 2 J R D1 4 B B 2 C 1 O 3 J R S1 4 G B 3 D 1 5 2 J	RES. CARBON 1K 5% 1/6W RES. CARBON 1OK 5% 1/6W RES. METAL FILM 1.5K 5% 2W
R 4 0	R N I 4 B K 2 C 1 8 0 0 F	RES. METAL FILM 180 1% 1/6W
R 1 4 R 1 5	R D   4 B B 2 C 1 O 1 J R D   4 D B 2 II 2 O 2 J	RES. CARBON 100 5% 1/6W RES. CARBON 2K 5% 1/2W
R 6 7	R 51 4 G B 3 D R 4 3 J	RES. NETAL FILM 0.43 5% 2W
R 7 4 R 7 5 R 7 6 R 7 7	R D1 4 B B 2 C 1 O 2 J R D1 4 D B 2 H 2 O 2 J R D1 4 B B 2 C 1 O 2 J NO USE	RES. CARBON 1K 5% 1/6W RES. CARBON 2K 5% 1/2W RES. CARBON 1K 5% 1/6W
R78 R79	R D14BB2C102J R D14DB2H102J	RES. CARBON 1K 5% 1/6W RES. CARBON 1K 5% 1/2W
R 8 5	R D14 DB 2 H 1 O 1 J	RES. CARBON 100 5% 1/2W
R 8 8	R D : 4 B B 2 C 1 O 4 J	RES. CARBON 100K 5% 1/6W
R 8 9 R 9 0 R 9 1 R 9 2 R 9 3 R 9 4 R 9 5 R 9 6	NO USE R D14BB2C102J R D14BB2C102J R D14BB2C102J R D14BB2C205J R D14BB2C100J NO USE R D14BB2C912J	RES. CARBON 1K 5% 1/6W RES. CARBON 10K 5% 1/6W RES. CARBON 1K 5% 1/6W RES. CARBON 2M 5% 1/6W RES. CARBON 10 5% 1/6W RES. CARBON 9.1K 5% 1/6W
R O 1	R N14 B K 2 C 1 O O 3 F	RES. NETAL FILM 100K 1% 1/6W
	S 76 - 06 0 4 - 08	RELAY
RY2 RY3	NO USE S 76 - 06 0 4 - 08 S 76 - 06 3 0 - 08	R E L A Y R E L A Y
SWI SW2	S 68 - 06 3 1 - 05 S 31 - 15 1 2 - 08	OUTPUT SW MASTER/SLAVE SWITCH
V R 1 V R 2 V R 3	R 12 - 1565 - 08 R 12 - 3568 - 08 R 12 - 0597 - 08	RES. SEMI FIXED 2KB RES. SEMI FIXED 30KB RES. SEMI FIXED 100

P	R	1	8	-3	Α
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		Y86-1860-00
REF. NO		NAME & DESCRIPTION
	A 0 I - 1 2 3 7 = 0 8	CASE
	163-0113-08	FRONT PANEL
	B31-0754-08	METER: CURRENT
	B31-0755-08	METER; VOLT
	B40-2737-24	SERIAL NO. PLATE
	B 4 2 - 3 7 3 1 - 0 8 B 4 2 - 3 7 3 3 - 0 8	MASTER/SLAVE LAREL
	B 4 2 - 6 0 3 5 - 0 8	FUSE RATING LABEL RATING:AC100V 50/60H2 100W
	B 4 2 - 6 0 3 6 - 0 8	RATING: AC120V 50/60HZ 100W
	B42-6037-08	RATING: AC220V 50/60HZ 100W
	B 4 2 - 6 0 3 8 - 0 8	RATING; AC240V 50/60HZ 100W
	B 4 2 - 6 0 3 9 - 0 8	RATING; AC120V 60HZ 100W
	B63-0173-00	INSTRUCTION MANUAL: JAPANESE
	B 6 3 - 0 1 7 4 - 0 0	INSTRUCTION MANUAL; ENGLISH
	E21-0670-03	TERMINAL, RED
	E21-0671-03	TERNINAL, BLACK
	E 2 1 - 0 6 7 2 - 0 3	TERMINAL, WHITE
	E 29 - 05 06 - 04	SHORTING BAR
	E 29 - 05 4 2 - 08	1. U G ; N 3
	E 3 0 - 0 0 2 7 - 3 5 E 3 0 - 0 5 4 5 - 0 5	UL/CSA POWER CORD JIS POWER CORD
	E30-0571-15	SAA POWER CORD
	E30-1815-05	CEE POWER CORD
	E30-1867-05	BS POWER CORD
	101-0885-08	HEAT SINK
	F 0 5 - 2 0 2 1 - 0 8	FUSE (5 X 2 O N N ) 2 A / 2 5 O V
	F05-2023-05	FUSE(6X32NH) 2A/250V
	F 29 - 0515 - 08	INSULATOR: FOR Q6
	F 2 9 - 0 5 1 7 - 0 8	INSULATOR; FOR Q6/Q11
	F51-0009-08	FUSE(6X30HH) 3A/125V
	1110-2853-08	FOAMED STYRENE PAD (FRONT) FOAMED STYRENE PAD (REAR)
	H 10 - 2854 - 08	
	1153-0112-08	CARTON BOX
	J02-0529-08	FOOT
	J19-1671-08	CLAMPER: FOR 2-CORE AC CORD
	J19-1672-08	CLAMPER; FOR 3-CORE AC CORD
	J21-4720-08	BRACKET; FOR P.C.B
	J21-4758-08	BRACKET; FOR AC CORD BUSHING
	J29-0519-08	
	J 3 0 - 0 6 3 5 - 0 8	VOLUNE SPACER; FOR VROI
	J 4 2 - 0 0 8 3 - 0 5	BUSHING: FOR 2-CORE AC CORD
	J 12 - 0085 - 05	BUSHING: FOR 3-CORE AC CORD
	K 0 1 - 0 4 1 7 - 0 5 K 2 1 - 0 9 0 7 - 1 4	II A N D I. E K N O B
	K21-0911-04	KNOB; FINE/CURRENT
	K 2 4 - 3 0 0 6 - 0 4	KNOB, OUTPUT
	K 27 - 05 09 - 04	PUSH BUTTON, ORANGE; POWER
	1.07-1517-08	POWER TRANSFORMER
	N 0 9 - 0 7 1 8 - 0 5	SCREW, SENS PAN HD M3X6
	N 0 9 - 0 7 5 7 - 0 5	SCREW, SENS BINDING TAPTITE 3
	N 0 9 - 0 7 7 6 - 0 5	SCREW, SENS PAN HD M3X10
	N 0 9 - 0 7 7 7 - 0 5	SCREW, SENS PAN IID M4X6
	N 0 9 - 0 7 8 9 - 0 5	SCREW, SENS PAN ND M3X10
	NO9-0797-08	SCREW, SENS TAPTITE 3X10
	N 1 4 - 0 4 0 4 - 0 4 N 8 9 - 3 0 0 6 - 4 1	FLANGE NUT N3 SCREW.BINDING TAPTITE 3X6
	N 8 9 - 3 0 0 6 - 4 1 N 8 9 - 3 0 1 2 - 4 1	SCREW, BINDING TAPTITE 3X6 SCREW, BINDING TAPTITE 3X12
	540-2533-08	PUSH SWITCH: POWER
	W02-2268-08	AMP UNIT
V R O 1	R 2 9 - 3 5 0 3 - 0 8	VOLUNE 10K
	R 29 - 1508 - 08	VOLUME 1 K
V R O 2		VOLUKE 10K

	PR18-	3A AMP UNIT	REF. NO	PARTS NO 2 S C 1 8 1 5 (G R)	NAME & DESCR TR. SI, NPN	IPTION		
	W	02-2268-08	Q 5 Q 6	2 S C 1 8 1 5 (G R) 2 S D 1 1 4 8 (O)	TR. SI, NPN TR. SI, NPN			
REF. NO	PARTS NO E21-0674-08 E40-7141-08 E40-7142-08 J13-0518-08 R92-0150-05	NAME & DESCRIPTION EXTERNAL OUTPUT TERMINAL PIN CONNECTOR 2P(LINE VOLTAGE) PIN CONNECTOR IP(LINE VOLTAGE) FUSE CLIP; FOR 6X30MM JUMPING RES. ZERO OHM (10MM)	Q7 Q8 Q9 - Q10 Q15 Q16	2 S C 2 2 3 8 ( Y ) 2 S C 3 4 2 1 ( Y ) 2 S C 1 8 1 5 ( G R ) 2 S C 1 8 1 5 ( G R ) NO USE	TR. SI, NPN			
C 1 C 2 C 3	R92-1061-05 C90-3019-08 CQ92M1H102K C91-2559-08	JUMPING RES. ZERO OHM (5MM) CAP. ELECTRO 1000 105 C 35V CAP. MYLAR 1000P 10% 50V CAP. CERAMIC 0.1 0.25P 50V	Q 1 7 Q 1 1 A Q 1 1 B	DTA143EF  2SD1148(0) 2SD1148(0)	TR. DIGITAL TR. SI, NPN TR. SI, NPN			
C 4 C 5 C 6 C 7	CQ92 N 1 H 4 7 2 K CQ92 N 1 H 1 O 3 K NO USE C90 - 3 O 2 O - 0 8	CAP. MYLAR 4700P 10% 50V CAP. MYLAR 0.01 10% 50V CAP. ELECTRO 100 105°C 25V	R 1 R 2	R D I 4 B B 2 C 1 2 2 J R D I 4 B B 2 C 1 2 3 J	RES. CARBON RES. CARBON	1 . 2 K 1 2 K	5 % 5 %	1/6W 1/6W
C 8 C 9 C 1 0 C 1 1	CF 9 3 A N 2 E R 2 2 K NO US E C 9 0 - 3 0 2 1 - 0 8 CF 9 3 A N 1 J R 2 2 K	CAP. POLYESTER 0.22P 10% 250V  CAP. ELECTRO 2200 105 C 35V  CAP. POLYESTER 0.22P 10% 63V	R 2 R 3 R 4 R 5	R D I 4 D B 2 H 3 O 2 J R D I 4 B B 2 C 3 O 2 J R D I 4 B B 2 C 5 I O J R D I 4 B B 2 C 1 O 2 J	RES. CARBON RES. CARBON RES. CARBON RES. CARBON RES. CARBON	3 K 5 1	5 % 5 % 5 %	1/6W 1/6W 1/6W 1/6W
C 2 2 C 2 6	C91-2559-08 C90-3174-08	CAP. CERAMIC 0.1 0.25P .50V  CAP. ELECTRO 10 1% 50V	R 6 R 7 R 8 R 9	R D 1 4 B B 2 C 2 7 3 J R N 1 4 B K 2 C 5 1 O 1 F R D 1 4 B B 2 C 2 O 2 J R D 1 4 B B 2 C 1 O 2 J	RES. METAL FILM RES. CARBON RES. CARBON	5.1K 2K 1K	1 % 5 % 5 %	1/6W 1/6W 1/6W
C 2 7 C 2 8 C 2 9	NO USE C90-3020-08 C91-2559-08	CAP. ELECTRO 100 105°C 25 Y CAP. CERAMIC 0.1 0.25P 50 V	R 1 0 R 1 1 R 1 2 R 1 3	R D 1 4 B B 2 C 5 1 1 J R D 1 4 B B 2 C 5 1 3 J N O U S E R D 1 4 B B 2 C 2 O 2 J	RES. CARBON RES. CARBON RES. CARBON	5 1 0 5 1 K 2 K	5 % 5 %	1/6W 1/6W
C 3 2 C N 1 C N 2	E40-7218-08 E40-7344-08	CAP. POLYESTER IP 10% 63V  PIN CONNECTOR 2P  PIN CONNECTOR 3P	R 1 4 R 1 5 R 1 6 R 1 7	R D I 4 B B 2 C 1 5 2 J R D I 4 B B 2 C 1 0 2 J R D I 4 B B 2 C 5 I 2 J N O U S E	RES. CARBON RES. CARBON RES. CARBON	1.5K 1K 5.1K	5 % 5 % 5 %	1/6W 1/6W 1/6W
C N 3 C N 4 C N 5 C N 6 C N 7 C N 8	NO USE E40-7i26-08 E40-7219-08 E40-7219-08 E40-7219-08 E40-7229-08	PIN CONNECTOR 2P PIN CONNECTOR 3P PIN CONNECTOR 3P PIN CONNECTOR 4P PIN CONNECTOR 4P	R 1 8 R 1 9 P 2 0 R 2 1 R 2 2 R 2 3 R 2 4	R D 1 4 B B 2 C 5 1 3 J R D 1 4 B B 2 C 1 0 3 J R D 1 4 B B 2 C 1 0 2 J R N 1 4 B K 2 C 3 3 0 3 F R D 1 4 B B 2 C 1 0 2 J R N 1 4 B K 2 C 9 1 0 1 F R N 1 4 B K 2 C 9 1 0 1 F	RES. CARBON RES. CARBON RES. CARBON RES. METAL FILM RES. CARBON RES. METAL FILM RES. METAL FILM	1 K 9 . 1 K	5 % 5 % 5 % 1 % 5 %	1/6W 1/6W 1/6W 1/6W 1/6W 1/6W
C N 1 1 C N 1 2 C N 1 3	E 4 0 - 7 3 3 2 - 0 8 E 4 0 - 7 3 3 3 - 0 8 E 4 0 - 7 3 3 3 - 0 8	PIN CONNECTOR 4P PIN CONNECTOR 2P PIN CONNECTOR 2P	R 2 7 R 2 8 R 2 9	R D F 4 B B 2 C 1 O 2 J R D 1 4 B B 2 C 1 O 3 J R S 1 4 G B 3 D 1 5 2 J	RES, CARBON RES, CARBON RES, NETAL FILM	1 K 1 O K	5 % 5 % 5 %	1/6W 1/6W 2W
C N 18	E40-7440-08	CONNECTOR -	R 3 0	R S 1 4 G B 3 A R 3 3 J	RES. METAL FILM	0.33	5 %	1 W
C N 2 3 C N 2 4 C O 1	E 4 0 - 3 2 4 0 - 0 5 E 4 0 - 7 3 3 3 - 0 8 C 9 0 - 3 0 1 8 - 0 8	PIN CONNECTOR 5P PIN CONNECTOR 2P CAP. ELECTRO 1 105°C 50V	R 3 4 R 3 5 R 3 6 R 3 7	R D I 4 B B 2 C 1 2 2 J R D I 4 B B 2 C 1 2 3 J R D I 4 B B 2 C 3 O 2 J R D I 4 B B 2 C 5 I O J	RES. CARBON RES. CARBON RES. CARBON RES. CARBON	1 , 2 K 1 2 K 3 K 5 1	5 % 5 % 5 %	1/6W 1/6W 1/6W
C O 1 C O 2 C O 3	C 9 1 - 1 3 2 3 - 0 8 N O U S E C 9 0 - 3 0 4 6 - 0 8	CAP. CERAMIC 0.1 20% 250V CAP. ELECTRO 100 105°C 50V	R 3 8 R 3 9 R 4 0	R D I 4 B B 2 C 1 3 3 J R D I 4 B B 2 C 2 7 3 J R N I 4 B K 2 C 5 1 R O F	RES. CARBON RES. CARBON RES. METAL FILM	27 K 51.0	5%	1/6W 1/6W 1/6W
D 1 D 2 D 3	1 B 4 B 4 2 ER A 1 5 - 0 1 1 S S 2 7 0 A	DIODE, STACK DIODE DIODE	R 4 3 R 4 4 R 4 5	R D 1 4 B B 2 C 1 O 3 J R D 1 4 B B 2 C 1 O 1 J R D 1 4 D B 2 H 2 O 2 J	RES. CARBON RES. CARBON RES. CARBON	1 0 K 1 0 0 2 K	5 % 5 %	1/6W 1/6W 1/2W
D 4 D 5 D 6 D 7	1 S S 2 7 0 A 1 S S 2 7 0 A 1 S S 2 7 0 A 1 S S 2 7 0 A	D I O D E D I O D E D I O D E	R 6 7 R 7 4 R 7 5	R S I 4 G B 3 D R 1 5 J  R D I 4 B B 2 C 1 0 2 J  R D I 4 D B 2 H 2 0 2 J	RES. CARBON RES. CARBON	1 K 2 K	5 % 5 %	2 W
D 8 D 9 D 1 0	NO USE D10XB40 ERAI5-01	DIODE, STACK	R 7 6 R 7 7 R 7 8 R 7 9	R D 1 4 B B 2 C 1 O 2 J NO USE R D 1 4 B B 2 C 1 O 2 J R D 1 4 D B 2 H 1 O 2 J	RES. CARBON RES. CARBON RES. CARBON	1 K 1 K 1 K	5 % 5 %	1/6W 1/6W 1/2W
D 1 4 D 1 5 D 1 6	1 S S 2 7 0 A 1 S S 2 7 0 A 1 S S 2 7 0 A	DIODE DIODE	R 8 5	R D 1 4 D B 2 H 1 O 1 J	RES. CARBON	100 100K	5 % 5 %	1/2W
D 2 8	ISS270A	DIODE	R 8 9 R 9 0	NO USE RD14BB2C102J	RES. CARBON	ı K	5 %	1/6W
D 3 3 D 3 4 D 3 7	ERA 15 - 01 1SS 270 A ERA 15 - 01	D I O D E D I O D E	R 9 1 R 9 2 R 9 3 R 9 4	R D 1 4 B B 2 C 1 O 3 J R D 1 4 B B 2 C 1 O 2 J R D 1 4 B B 2 C 2 O 5 J R D 1 4 B B 2 C 1 O O J	RES. CARBON RES. CARBON RES. CARBON RES. CARBON	1 0 K 1 K 2 H 1 0	5 % 5 % 5 %	1/6W 1/6W 1/6W 1/6W
D 3 8 D 3 9	1 S S 2 7 0 A ERA 1 5 - 0 1	DIODE	R 95 R 96	NO USE RD14BB2C912J	RES. CARBON	9.1K	5 %	1 / 6 W
D O 1	3 0 D 1	DIODE	R 3 2 A R 3 2 B	R S 1 4 G B 3 A R 3 3 J R S 1 4 G B 3 A R 3 3 J	RES. METAL FILM RES. METAL FILM		5 % 5 %	1 W 1 W
1 C 1 1 C 2 1 C 3	UPC151C UPC151C UPC1093J	IC,OP AMP IC,OP AMP IC,VARIABLE SHUNT REGULATOR	ROI	R N 1 4 B K 2 C 1 0 0 3 F	RES. METAL FILM		1 %	1/6W
1 C 9	11 A 1 7 8 L 1 2 A	IC, TERMINAL FIXED VOLTAGE REG.	RY1 RY2 RY3	S 7 6 - 0 6 0 4 - 0 8 S 7 6 - 0 6 0 4 - 0 8 S 7 6 - 0 6 0 4 - 0 8	RELAY RELAY RELAY			
LED1 LED2 LED0 LED01	L N 2 2 2 R P L N 3 2 2 G P L N 2 2 2 R P L N 2 2 2 R P	LED; RED LED; GREEN LED; RED LED; RED	RY4 SW1 SW2	S76 + 0630 - 08 S68 - 0631 - 05 S31 - 1512 - 08	RELAY  OUTPUT SW  MASTER/SLAVE SW	I Т С Н		
Q 1 Q 2 Q 3	2SC1815 (GR) 2SC1815 (GR) 2SC1815 (GR)	TR. SI, NPN TR. SI, NPN TR. SI, NPN	V R 1 V R 2 V R 3	R 1 2 - 1 5 6 5 - 0 8 R 1 2 - 5 5 4 7 - 0 8 R 1 2 - 0 5 9 7 - 0 8	RES. SEMI FIXED RES. SEMI FIXED RES. SEMI FIXED	100KB		

### PR18-5A

### Y86-1870-00

REF. NO	PARTS NO	NAME & DESCRIPTION
KEF. NO	A 0 I - 1 2 3 8 - 0 8	COVER
	A 6 3 - 0 1 1 4 - 0 8	FRONT PANEL
	B31-0757-08	METER; VOLT
	B 31 - 07 5808	KETER; CURRENT
	B 4 0 - 2 7 3 7 - 2 4 B 4 2 - 3 7 3 1 - 0 8	SERIAL NO. PLATE MASTER/SLAVE LABEL
	B 4 2 - 3 7 3 8 - 0 8	FUSE RATING LABEL
	B 42-6055-08	RATING; AC100V 50/60HZ 165W
	B 42-6056-08	RATING; AC120 V 50/60 HZ 165 W
	B 4 2 - 6 0 5 7 - 0 8	RATING: AC220V 50/60HZ 165W
	B 4 2 ~ 6 0 5 8 - 0 8	RATING; AC240V 50/60HZ 165W RATING; AC120V 60HZ 165W
	B 4 2 - 6 0 5 9 - 0 8 B 6 3 - 0 1 7 3 - 0 0	RATING; AC120V 60HZ 165W INSTRUCTION NANUAL; JAPANESE
	B 6 3 - 0 1 7 4 - 0 0	INSTRUCTION MANUAL; ENGLISH
	E 21-0670-03	TERNINAL, RED
	E 21-0671-03	TERMINAL, BLACK
	E21-0672-03	TERMINAL, WHITE
	E 29-0506-04 E 29-0542-08	SHORTING BAR LUG; M3
	E 30-0027-35	UL/CSA POWER CORD
	E 30-0545-05	JIS POWER CORD
	E 30-0571-15	SAA POWER CORD
	E 30-1815-05	CEE POWER CORD BS POWER CORD
	E 30-1867-05 F 01-0886-08	HEAT SINK
	F 0 5 - 3 0 2 2 - 0 5	FUSE(6X32MM) 3A/250V
	F 29-0517-08	INSULATOR; FOR Q6/Q11
	F 29-0518-08	INSULATOR: FOR QIIA/QIIB/QIIC
	F50-0004-08 F51-0010-08	FUSE(5X20NM) 3A/250V FUSE(6X30NM) 5A/125V
	H 10-2856-08	FORMED STYRENE PAD (FRONT)
	H 10-2857-08	FOAMED STYRENE PAD (REAR)
	11 2 0 - 1 7 3 4 - 0 8	VINYL COVER
	1153-0113-08	CARTON BOX FOOT
	J 0 2 - 0 5 2 9 - 0 8 J 1 9 - 1 6 7 1 - 0 8	CLAMPER; FOR 2-CORE AC CORD
	J 19-1672-08	CLAMPER; FOR 3-CORE AC CORD
	J 2 1 - 4 7 2 0 - 0 8	BRACKET; FOR P.C.B
	J 21-4758-08	BRACKET; FOR AC CORD BUSHING
	J 3 0 - 0 6 3 5 - 0 8 J 4 2 - 0 0 8 3 - 0 5	VOLUME SPACER; FOR VROI BUSHING; FOR 2-CORE AC CORD
	J 42-0085-05	BUSHING; FOR 3-CORE AC CORD
	K 0   - 0 4 1 7 - 0 5	II A N D L. E
	K 2 1 - 0 9 0 7 - 1 4	KNOB
	K 21-0911-04	KNOB; FINE/CURRENT
	K 2 4 - 3 0 0 6 - 0 4 K 2 7 - 0 5 0 9 - 0 4	KNOB, OUTPUT PUSH BUTTON, ORANGE; POWER
	1.07-1518-08	POWER TRANSFORMER
	N O 8 - 0 7 1 8 - 0 5	SCREW, SEMS PAN 11D M3X6
	N O 9 - 0 7 5 7 - 0 5	SCREW, SEMS BINDING TAPTITE 3X6
	N O 9 - 0 7 7 6 - 0 5	SCREW, SENS PAN HD M3X10 SCREW. SENS PAN HD M4X6
	N O 9 - 0 7 7 7 - 0 5 N O 9 - 0 7 8 9 - 0 5	SCREW, SENS PAN HD N4X6 SCREW, SENS PAN HD N3X10
	N O 9 - 0 7 9 7 - 0 8	SCREW, SENS TAPTITE 3X10
	N 1 4-0404-04	FLANGE NUT H3
	N 8 9-3006-41	SCREW, BINDING TAPTITE 3X6
	N 8 9 - 3 0 1 2 - 4 1 S 4 0 - 2 5 3 3 - 0 8	SCREW.BINDING TAPTITE 3X12 PUSH SWITCH; POWER
	W O 2- 2 2 6 9 - 0 8	AMP UNIT
VROI	R 2 9 - 3 5 0 3 - 0 8	VOLUME 10K
	R 2 9-1508-08	VOLUNE 1K
V R O 3	R 29-3504-08	VOI.UHE 10K

#### PR18-5A AMP UNIT

		8-5A AMP UNII N02-2269-08
REF. N	E 2 1 - 0 6 7 4 - 0 8 E 4 0 - 7 1 4 1 - 0 8 E 4 0 - 7 1 4 2 - 0 8 J 1 3 - 0 5 1 8 - 0 8	NAME & DESCRIPTION EXTERNAL OUTPUT TERMINAL PIN CONNECTOR 2P(LINE VOLTAGE) PIN CONNECTOR 1P(LINE VOLTAGE) FUSE CLIP; FOR 6X30MM
C 1 C 2 C 3 C 4	J 7 3 - 0 3 2 6 - 0 8 R 9 2 - 0 1 5 0 - 0 5 K 9 2 - 1 0 6 1 - 0 5 C 9 0 - 3 0 1 9 - 0 8 C 9 0 1 - 2 5 5 9 - 0 8 C 9 0 2 X 1 H 1 7 2 K C 9 0 2 X 1 H 3 7 2 K C 9 0 2 X 1 H 3 7 2 K	PCB (UNMOUNTED) JUMPING RES. ZERO OHM (10 MM) JUMPING RES. ZERO OHM (5 MM) CAP. ELECTRO 1000 105°C 35V CAP. MYLAR 1000P 10% 50V CAP. CERANIC 0.1 0.25P 50V CAP. MYLAR 4700P 10% 50V CAP. MYLAR 0.01 10% 50V
C 6 C 7 C 8 C 9	NO USE C90-3020-08 CF93AN2ER22K NO USE	CAP. ELECTRO 100 105 C 25 V CAP. POLYESTER 0.22P 10% 250 V
C 1 0 C 1 1	C 9 0 - 3 0 2 4 - 0 8 C F 9 3 A N 1 J R 2 2 K	CAP. ELECTRO 3300 105°C 35V CAP. POLYESTER 0.22P 10% 63V
C 2 2	C 9 1 - 2 5 5 9 - 0 8	CAP. CERANIC 0.1 0.25P 50V
C 2 6 C 2 7	C 9 0 - 3 1 7 4 - 0 8 N O U S E	CAP. ELECTRO 10 1% 50V
C 2 8 C 2 9	C 9 0 - 3 0 2 0 - 0 8 C 9 1 - 2 5 5 9 - 0 8	CAP. ELECTRO 100 105°C 25V CAP. CERAMIC 0.1 0.25P 50V
C 3 2	CF93AN1JIROK	CAP. POLYESTER 1P 10% 63V
C N 1 C N 2 C N 3	E 4 0 - 7 2 1 8 - 0 8 E 4 0 - 7 3 4 4 - 0 8 NO USE	PIN CONNECTOR 2P PIN CONNECTOR 3P
C N 4 C N 5 C N 6 C N 7 C N 8	E 4 0 - 7 1 2 6 - 0 8 E 4 0 - 7 2 1 9 - 0 8 E 4 0 - 7 2 1 9 - 0 8 E 4 0 - 7 2 2 9 - 0 8 E 4 0 - 7 2 2 9 - 0 8	PIN CONNECTOR 2P PIN CONNECTOR 3P PIN CONNECTOR 3P PIN CONNECTOR 4P PIN CONNECTOR 4P
C N 1 1 C N 1 2 C N 1 3	E 4 0 - 7 3 3 2 - 0 8 E 4 0 - 7 3 3 3 - 0 8 E 4 0 - 7 3 3 3 - 0 8	PIN CONNECTOR 4P PIN CONNECTOR 2P PIN CONNECTOR 2P
C N 1 8	E40-7440-08	CONNECTOR
C N 2 3	E 4 0 - 3 2 4 0 - 0 5 E 4 0 - 7 3 3 3 - 0 8	PIN CONNECTOR 5P PIN CONNECTOR 2P
C O 1	C 9 0 - 3 0 1 8 - 0 8	CAP. ELECTRO 1 105°C 5 0V
C 0 1 C 0 2	C 9 1 - 1 3 2 3 - 0 8 NO USE	CAP. CERANIC 0.1 20% 250V
C 0 3	C 9 0 - 3 0 4 6 - 0 8	CAP. ELECTRO 100 105°C 5 QV
D 1 D 2 D 3 D 4 D 5 D 6 D 7 D 8 D 9	1 B 4 B 4 2 E R A 1 5 - 0 1 1 S S 2 7 0 A 1 S S 2 7 0 A NO US E D 1 5 X B 4 0 E R A 1 5 - 0 1	DIODE, STACK DIODE DIODE DIODE DIODE DIODE DIODE DIODE DIODE DIODE
014 015 016	1 S S 2 7 0 A 1 S S 2 7 0 A 1 S S 2 7 0 A	DIODE DIODE DIODE
28	1 S S 2 7 0 A	DIODE
33	ERA15-01 1SS270A	DIODE
37	E R A 1 5 - 0 1 1 S S 2 7 0 A E R A 1 5 - 0 1	D 1 O D E D 1 O D E
01	3001	DIODE
C 1 C 2 C 3	UPC151C UPC151C UPC1093J	IC,OP AMP IC,OP AMP IC,VARIABLE SMUNT REGULATO!
C 9	HA178L12A	IC, TERNINAL FIXED VOLTAGE NEC.
EDI ED2 EDO EDOI	L N 3 2 2 G P L N 2 2 2 R P L N 2 2 2 R P L N 2 2 2 R P	LED; GREEN LED; RED LED; RED LED; RED
2 3	2 S C 1 8 1 5 (G R) 2 S C 1 8 1 5 (G R) 2 S C 1 8 1 5 (G R)	TR. SI, NPN TR. SI, NPN TR. SI NPN

Q 4 Q 5 Q 6 Q 7 Q 8 Q 9 Q 1 0 Q 1 1	PARTS NO 2SC1815 (GR) 2SC1815 (GR) 2SD1148 (O) 2SC2238 (Y) 2SC3421 (Y) 2SC3421 (Y) 2SC1815 (GR) 2SC1816 (GR)	NAME & DESCRIPTION TR. SI, NPN
Q 1 5 Q 1 6 Q 1 7	2SC1815 (GR) NO USE DTA143EF	TR. SI, NPN TR. DIGITAL
Q 1 1 A Q 1.1 B Q 1 1 C	2 S D 1 1 4 8 ( 0 ) 2 S D 1 1 4 8 ( 0 ) 2 S D 1 1 4 8 ( 0 )	TR. SI, NPN TR. SI, NPN TR. SI, NPN
R 1 R 2	R D 1 4 B B 2 C 1 2 2 J R D 1 4 B B 2 C 1 2 3 J	RES. CARBON 1.2K 5% 1/6W RES. CARBON 12K 5% 1/6W
R 2 R 3 R 4 R 5 R 6 R 7 R 8 R 9 R 1 0 R ! 1	RD14DB2H302J RD14BB2C510J RD14BB2C510J RD14BB2C510J RD14BB2C5101F RD14BB2C273J RN14BR2C25101F RD14BB2C202J RD14BB2C101J RD14BB2C513J RD14BB2C513J R014BB2C513J	RES. CARBON 3K 5% 1/2W RES. CARBON 3K 5% 1/6W RES. CARBON 51 5% 1/6W RES. CARBON 1K 5% 1/6W RES. CARBON 27K 5% 1/6W RES. METAL FILM 5.1K 1% 1/6W RES. CARBON 2K 5% 1/6W RES. CARBON 1K 5% 1/6W RES. CARBON 100 5% 1/6W RES. CARBON 51K 5% 1/6W RES. CARBON 51K 5% 1/6W RES. CARBON 51K 5% 1/6W
R 1 3 R 1 4 R 1 5 R 1 6 R 1 7	RD14BB2C202J RD14BB2C152J RD14BB2C102J RD14BB2C512J NO USE	RES. CARBON 2K 5% 1/6W RES. CARBON 1.5K 5% 1/6W RES. CARBON 5.1K 5% 1/6W RES. CARBON 5.1K 5% 1/6W
R 1 8 R 1 9 R 2 0 R 2 1 R 2 2 R 2 3 R 2 4	RD14BB2C513J RD14BB2C103J RD14BB2C102J RN14BB2C102J RN14BB2C102J RN14BB2C102J RN14BB2C30001F	RES. CARBON 51K 5% 1/6W RES. CARBON 10K 5% 1/6W RES. CARBON 1K 5% 1/6W RES. METAL FILM 330K 1% 1/6W RES. METAL FILM 9.1K 1% 1/6W RES. METAL FILM 9.1K 1% 1/6W RES. METAL FILM 3.K 1% 1/6W RES. METAL FILM 3.K 1% 1/6W
R 2 7 R 2 8 R 2 9 R 3 0 R 3 1 R 3 2	R D 1 4 B B 2 C 1 0 2 J R D 1 4 B B 2 C 1 0 3 J R S 1 4 G B 3 D 1 5 2 J R S 1 4 G B 3 A R 3 3 J NO USE R S 1 4 G B 3 A R 3 3 J	RES. CARBON 1K 5% 1/6W RES. CARBON 10K 5% 1/6W RES. METAL FILM 1.5K 5% 2W RES. METAL FILM 0.33 5% 1W
R 3 3 R 3 4 R 3 5 R 3 6 R 3 7 R 3 8 R 3 9 R 4 0	NO USE RD14BB2C123J RD14BB2C123J RD14BB2C302J RD14BB2C302J RD14BB2C510J RD14BB2C133J RD14BB2C273J RN14BB2C51ROF	RES. CARBON 1.2K 5% 1/6W RES. CARBON 12K 5% 1/6W RES. CARBON 3% 5% 1/6W RES. CARBON 51 5% 1/6W RES. CARBON 13K 5% 1/6W RES. CARBON 13K 5% 1/6W RES. CARBON 27K 5% 1/6W RES. METAL FILM 51.0 1% 1/6W
R 4 3 R 4 4 R 4 5	R D	RES. CARBON 10K 5% 1/6W RES. CARBON 100 5% 1/6W RES. CARBON 2K 5% 1/2W
R 6 7	R S I 4 G B 3 D R 1 2 J	RES. METAL FILM 0.12 5% 2W
R 7 4 R 7 5 R 7 6 R 7 7	R D1 4 B B 2 C 1 O 2 J R D1 4 D B 2 H 2 O 2 J R D1 4 B B 2 C 1 O 2 J NO USE	RES. CARBON 1K 5% 1/6W RES. CARBON 2K 5% 1/2W RES. CARBON 1K 5% 1/6W
R 7 8 R 7 9	R D I 4 B B 2 C 1 O 2 J R D I 4 D B 2 H 1 O 2 J	RES. CARBON 1K 5% 1/6W RES. CARBON 1K 5% 1/2W
R 8 5	R D1 4 D B 2 H 1 O 1 J	RES. CARBON 100 5% 1/2W
R 8 8 R 8 9	R DI 4 B B 2 C 1 O 4 J NO USE	RES. CARBON 100K 5% 1/6W
R 9 0 R 9 1 R 9 2 R 9 3 R 9 4 R 9 5 R 9 6	R D1 4 BB 2 C 1 0 2 J R D1 4 BB 2 C 1 0 3 J R D1 4 BB 2 C 1 0 3 J R D1 4 BB 2 C 2 0 5 J R D1 4 BB 2 C 1 0 0 J NO USE R D1 4 BB 2 C 9 1 2 J	RES. CARBON 1K 5% 1/6W RES. CARBON 10K 5% 1/6W RES. CARBON 1K 5% 1/6W RES. CARBON 2H 5% 1/6W RES. CARBON 10 5% 1/6W RES. CARBON 9.1K 5% 1/6W
R 3 2 A	R SI 4 G B 3 A R 3 3 J	RES. METAL FILM 0.33 5% 1W
R 3 2 B R 3 2 C	R S1 4 G B 3 A R 3 3 J R S1 4 G B 3 A R 3 3 J	RES. METAL FILM 0.33 5% 1W RES. METAL FILM 0.33 5% 1W
R O 1	R N 1 4 B K 2 C 4 0 0 3 F	RES. METAL FILM 100K 1% 1/6W
R Y 1 R Y 2 R Y 3 R Y 4	S 76 - 0 6 0 4 - 0 8 S 76 - 0 6 0 4 - 0 8 S 76 - 0 6 0 4 - 0 8 S 76 - 0 6 3 0 - 0 8	RELAY RELAY RELAY RELAY

REF. NO	PARTS NO	NAME & DESCRI	NOIT9
S W 1	S 6 8 - 0 6 3 1 - 0 5	OUTPUT SW	TCH
S W 2	S 3 1 - 1 5 1 2 - 0 8	MASTER/SLAVE SWI	
V R 1	R 1 2 - 1 5 6 5 - 0 8	RES. SEMI FIXED	2 K B
V R 2	R 1 2 - 5.5 4 7 - 0 8	RES. SEMI FIXED	1 0 0 K B
V R 3	R 1 2 - 0 5 9 7 - 0 8	RES. SEMI FIXED	1 0 0
Z D 1	II Z S G A	DIODE, ZENER	5.75 V

# **PARTS LIST**

		Y86-1880-00
REF. NO	A 0 1 - 1 2 3 6 - 0 8 A 6 3 - 0 1 1 5 - 0 8 B 3 1 - 0 7 5 6 - 0 8 B 3 1 - 0 7 5 9 - 0 8	NAME & DESCRIPTION COVER FRONT PANEL METER; CURRENT METER; VOLT
	$\begin{array}{c} 840-2737-24 \\ 842-3731-08 \\ 842-3740-08 \\ 842-3740-08 \\ 842-6025-08 \\ 842-6025-08 \\ 842-6025-08 \\ 842-6029-08 \\ 842-6029-08 \\ 863-0173-00 \\ 863-0173-00 \\ 863-0174-00 \\ E21-0671-03 \\ E21-0671-03 \\ E21-0672-03 \\ E21-0672-03 \\ E29-0506-04 \\ E29-0506-04 \\ E29-0506-04 \\ E29-050504-08 \end{array}$	SERIAL NO. PLATE  MASTER/SLAVE LABEL  FUSE RATING LABEL  RATING: AC100V 50/60HZ 73W  RATING: AC120V 50/60HZ 73W  RATING: AC220V 50/60HZ 73W  RATING: AC220V 50/60HZ 73W  RATING: AC220V 50/60HZ 73W  RATING: AC220V 60HZ 73W  RATING: AC120V 60HZ 73W  INSTRUCTION MANUAL: JAPANESE INSTRUCTION MANUAL: ENGLISH  TERMINAL, RED  TERMINAL, BLACK  TERMINAL, WHITE  SHORTING BAR  LUG: M3
	E30-0027-35 E30-0545-05 E30-0571-15 E30-1815-05 E30-1867-05	UL/CSA POWER CORD JIS POWER CORD SAA POWER CORD CEE POWER CORD BS POWER CORD
	F01-0884-08 F05-1521-08 F29-0517-08 F50-0003-08 H10-2853-08 H10-2854-08 H10-2855-08 H10-2858-08 H10-2858-08 H10-2858-08 H10-2858-08 H20-1734-08 H53-0114-08 J02-0529-08	
	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	CLAMPER; FOR .2-CORE AC CORD CLAMPER; FOR .3-CORE AC CORD BRACKET; FOR P. C. B BRACKET; FOR AC CORD BUSHING VOLUME SPACER; FOR VRO1 BUSHING; FOR 2-CORE AC CORD BUSHING; FOR 3-CORE AC CORD
	K21-0907-14 K21-0911-04 K24-3006-04 K27-0509-04 L07-1519-08 N09-0718-05	KNOB KNOB:FINE/CURRENT KNOB:OUTPUT PUSH BUTTON,ORANGE:POWER POWER TRANSFORMER SCREW,SEMS PAN IID M3X6
	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	SCREW, SEMS PAN HD M4X10 SCREW, SEMS BINDING TAPTITE 3X6 SCREW, SEMS PAN HD M3X10 SCREW, SEMS TAPTITE 3X10 FLANGE NUT M3 SCREW, BINDING TAPTITE 3X6
V R O 1 V R O 2 V R O 3	803 0 1 0 - 4 1 840 - 25 3 3 - 0 8 802 - 2 2 7 0 - 0 8 829 - 35 0 3 - 0 8 839 - 0 8 0 0 - 0 8 829 - 35 0 4 - 0 8	SCREW, BINDING TAPTITE 3X10 PUSH SWITCH: POWER AMP UNIT VOLUME 10K VOLUME 1K VOLUME 10K

PR36-1.2A

PR36-1.2A AMP UNIT W02-2270-08				
REF. NO		NAME & DESCRIPTION EXTERNAL OUTPUT TERMINAL PIN CONNECTOR IP PIN CONNECTOR 2P(LINE VOLTAGE)		
	J 1 3 - 0 5 1 8 - 0 8 J 7 3 - 0 3 2 6 - 0 8 R 9 2 - 0 1 5 0 - 0 5	FUSE CLIP; FOR 6 X 3 0 MM PCR (UNMOUNTED) JUMPING RES. ZERO OHM (1 0 MM)		
C 1	R 9 2 - 1 0 6 1 - 0 5 C 9 0 - 3 0 2 3 - 0 8	JUMPING RES. ZERO OHM (5MM) CAP. ELECTRO 470 105°C 35V		
C 2 C 3 C 4	C Q 9 2 N 1 H 1 0 2 K C 9 1 - 2 5 5 9 - 0 8 C Q 9 2 N 1 H 4 7 2 K	CAP. CERAMIC 0.1 0.25P 50V CAP. MYLAR 4700P 10% 50V		
C 5 C 6 C 7	CQ92M1H103K NO USE C90-3020-08	CAP. MYLAR 0.01 10% 50V  CAP. ELECTRO 100 105°C 25V		
C 9 C 10	CF93AN2ER22K NO USE C90-3025-08	CAP. POLYESTER 0.22P 10% 250  CAP. ELECTRO 1000 105°C 63V		
C 1 1	CF93AN1JR22K	CAP. POLYESTER 0.22P 10% 63V  CAP. CERANIC 0.1 0.25P 50V		
C 2 6	C 9 0 - 3 1 7 4 - 0 8	CAP. ELECTRO 10 1% 50V		
C 2 7 C 2 8 C 2 9	NO USE C90-3020-08 C91-2559-08	CAP. ELECTRO 100 105°C 25V CAP. CERAMIC 0.1 0.25P 50V		
C 3 2	C F 9 3 A N 1 J 1 R 0 K	CAP. POLYESTER 1P 10% 63V		
C N 1 C N 2	E 4 0 - 7 2 1 8 - 0 8 E 4 0 - 7 3 4 4 - 0 8	PIN CONNECTOR 2P PIN CONNECTOR 3P		
C N 3 C N 4 C N 5	NO USE E40-7126-08 E40-7219-08	PIN CONNECTOR 2P PIN CONNECTOR 3P		
C N 6 C N 7	NO USE E 40-7229-08	PIN CONNECTOR 4P		
C N 1 1 C N 1 2	E 4 0 - 7 3 3 2 - 0 8 E 4 0 - 7 3 3 3 - 0 8 E 4 0 - 7 3 3 3 - 0 8	PIN CONNECTOR 4P PIN CONNECTOR 2P PIN CONNECTOR 2P		
CN13	E 40 - 7440 - 08	CONNECTOR		
C N 2 3	E 4 0 - 3 2 4 0 - 0 5 E 4 0 - 7 3 3 3 - 0 8	PIN CONNECTOR 5P PIN CONNECTOR 2P		
C 0 I	C 9 0 - 3 0 1 8 - 0 8	CAP. ELECTRO 1 105°C 50V		
C 0 1 C 0 2 C 0 3	C 9 1 - 1 3 2 3 - 0 8 NO USE C 9 0 - 3 0 4 6 - 0 8	CAP. CERAMIC 0.1 20% 250  CAP. ELECTRO 100 105 C 50V		
D 1 D 2 D 3 D 4 D 5 D 6	1 B 4 B 4 2 E R A 1 5 - 0 1 1 S S 2 7 0 A 1 S S 2 7 0 A 1 S S 2 7 0 A 1 S S 2 7 0 A	DIODE, STACK DIODE DIODE DIODE DIODE DIODE DIODE DIODE		
D 8 D 9 D 1 0	NO USE D3SB60 ERAI5-01	DIODE, STACK		
014	1 S S 2 7 0 A 1 S S 2 7 0 A 1 S S 2 7 0 A	DIODE DIODE DIODE		
28	1 S S 2 7 0 A	DIODE		
0 3 3 0 3 4	ERA15-01 1SS270A	D I O D E		
37 38 39	ERA15-01 1SS270A ERA15-01	D 1 O D E D 1 O D E D 1 O D E		
D O 1	E R A 1 5 - 0 1	DIODE		
C 1 C 2 C 3	U P C 1 5 1 C U P C 1 5 1 C U P C 1 0 9 3 J	IC,OP AMP IC,OP AMP IC,VARIABLE SHUNT REGULATOR		
C 9	H A 1 7 8 L 1 2 A	IC, TERMINAL FIXED VOLTAGE REG.		
. E D 1	I. N 2 2 2 R P I. N 3 2 2 G P	LED; RED LED; GREEN		
. E D O 1	L N 2 2 2 R P	LED; RED		
Q 1	2 S C 1 8 1 5 ( G R ) 2 S C 1 8 1 5 ( G R )	TR. SI, NPN TR. SI. NPN		

REF.NO Q4 Q5 Q6 Q7 Q8 Q9 Q10 Q11 Q15 Q16 Q17	PARTS NO 2 SC1 815 (GR) 2 SC1 815 (GR) 2 SD1148 (O) 2 SC2 238 (Y) 2 SC3 421 (Y) 2 SC3 421 (Y) 2 SC1815 (GR) 2 SD1148 (O) 2 SC1815 (GR) NO USE DTA143EF	TR. S	ME & DESCRI	PTION
R 1 R 2	R D 1 4 B B 2 C 1 2 2 J R D 1 4 B B 2 C 1 2 3 J	RES. RES.		1.2K 5% 1/6W 12K 5% 1/6W
K 2 R 3 R 4 R 5 R 6 R 7 R 8 R 9 R 1 0 R 1 1	R D 1 4 D B 2 H 3 O 2 J R D 1 4 B B 2 C 3 O 2 J R D 1 4 B B 2 C 5 1 O J R D 1 4 B B 2 C 1 2 3 J R D 1 4 B B 2 C 2 7 3 J R N 1 4 B K 2 C 2 2 4 O 1 F R D 1 4 B B 2 C 1 O 2 J R D 1 4 B B 2 C 1 O 2 J R D 1 4 B B 2 C 1 O 3 J R D 1 4 B B 2 C 5 1 3 J N O U S E	RES. RES. RES. RES. RES. RES. RES. RES.	CARBON CARBON CARBON CARBON CARBON METAL FILM CARBON CARBON CARBON CARBON	3 K 5% 1/2 W 3 K 5% 1/6 W 5 T 1/6 W 5 T 1/6 W 1 2 K 5% 1/6 W 2 7 K 5% 1/6 W 2 7 K 5% 1/6 W 2 L 4 K 1% 1/6 W 2 K 5% 1/6 W 1 K 5% 1/6 W 4 O K 5% 1/6 W 5 T 1/6 W
R 1 3 R 1 4 R 1 5 R 1 6	R D 1 4 B B 2 C 2 O 2 J R D 1 4 B B 2 C 1 5 2 J R D 1 4 B B 2 C 1 O 2 J R D 1 4 B B 2 C 5 1 2 J	RES. RES.	CARBON I	2 K 5% 1/6 W 1.5 K 5% 1/6 W 1 K 5% 1/6 W 5.1 K 5% 1/6 W
R 1 7 R 1 8 R 1 9 R 2 0 R 2 1 R 2 2 R 2 3 R 2 4	NO USE R D1 4 B B 2 C 5 1 3 J R D1 4 B B 2 C 1 0 3 J R D1 4 B B 2 C 1 0 2 J R D1 4 B B 2 C 1 0 2 J R D1 4 B B 2 C 1 0 2 J R D1 4 B B 2 C 1 0 2 J R N 1 4 B K 2 C 3 0 0 1 F R N 1 4 B K 2 C 3 0 0 1 F	RES. RES. RES. RES.	CARBON I CARBON I METAL FILM SCARBON I METAL FILM S	51K 5% 1/6W 0K 5% 1/6W K 5% 1/6W 30K 1% 1/6W K 5% 1/6W 1 1/6W 1 1/6W
R 2 7 R 2 8 R 2 9 R 3 0 R 3 1 R 3 2	R D 1 4 B B 2 C 1 0 2 J R D 1 4 B B 2 C 1 0 3 J R S 1 4 G B 3 D 3 9 2 J R S 1 4 G B 3 A R 4 7 J NO USE R S 1 4 G B 3 A R 4 7 J	RES. RES. RES.	CARBON I METAL FILM S	K 5% 1/6W 0K 5% 1/6W 8.9K 5% 2W 1.47 5% 1W
R 3 3 R 3 4 R 3 5 R 3 6 R 3 7 R 3 8 R 3 9 R 4 0	NO USE RD14BB2C122J RD14BB2C123J RD14BB2C302J RD14BB2C302J RD14BB2C333J RD14BB2C273J RN14BB2C273J	RES. RES. RES. RES. RES.	C A R B O N 1 C A R B O N 1 C A R B O N 3 C A R B O N 5 C A R B O N 2 C A R B O N 2	. 2 K 5% 1/6 W 2 K 5% 1/6 W K 5% 1/6 W 1 5% 1/6 W 3 K 5% 1/6 W 7 K 5% 1/6 W 1.0 1% 1/6 W
R 4 3 R 4 4 R 4 5	R D 1 4 B B 2 C 1 O 3 J R D 1 4 B B 2 C 1 O 1 J R D 1 4 D B 2 H 8 2 2 J	RES.	CARBON 1	0 K 5 % 1 / 6 W 0 0 5 % 1 / 6 W 1 . 2 K 5 % 1 / 2 W
R 6 7	R S 1 4 G B 3 D R 2 2 J	RES.	METAL FILM O	. 2 2 5 % 2 W
R 7 4 R 7 5 R 7 6 R 7 7	R D 1 4 B B 2 C 1 0 2 J R D 1 4 D B 2 H 8 2 2 J R D 1 4 B B 2 C 1 0 2 J N O U S E	RES.	CARBON 8	5 % 1/6 W 5 . 2 K 5 % 1/2 W 5 % 1/6 W
R 7 8 R 7 9	R D 1 4 B B 2 C 1 O 2 J R D 1 4 D B 2 H 1 O 2 J			K 5 % 1 / 6 W K 5 % 1 / 2 W
R 8 5	R D 1 4 D B 2 H 1 O 1 J	RES.	CARBON 1	00 5 % 1 / 2 W
R 8 8 R 8 9	R D 1 4 B B 2 C 1 O 4 J NO U S E	RES.	CARBON 1	00K 5% 1/6W
R 9 0 R 9 1 R 9 2 R 9 3	R D 1 4 B B 2 C 1 0 2 J R D 1 4 B B 2 C 1 0 3 J R D 1 4 B B 2 C 1 0 2 J R D 1 4 B B 2 C 2 0 5 J R D 1 4 B B 2 C 5 1 0 J N O U S E	RES. RES. RES.	CARBON I CARBON I CARBON 2	K 5% 1/6W OK 5% 1/6W K 5% 1/6W M 5% 1/6W 1 5% 1/6W
				0.1K 5% 1/6W
			METAL FILM 1	.00K 1% 1/6W
R Y 2 R Y 3	S 7 6 - 0 6 0 4 - 0 8 S 7 6 - 0 6 0 4 - 0 8 S 7 6 - 0 6 0 4 - 0 8 S 7 6 - 0 6 0 4 - 0 8 S 7 6 - 0 6 3 0 - 0 8	RELAY RELAY RELAY RELAY		
	S 6 8 - 0 6 3 1 - 0 5 S 3 1 - 1 5 1 2 - 0 8	O U T P U M A S T E	T SW R/SLAVE SWIT	CII
V R 2	R 1 2 - 1 5 6 4 - 0 8 R 1 2 - 5 5 4 7 - 0 8 R 1 2 - 0 5 9 7 - 0 8		SENI FIXED	K B 0 0 0 K B 0 0 0
Z D 1	H Z S 6 A	DIODE	, ZENER S	5.75 V

		PR36-3A
		Y86-1890-00
EF.NO	PARTS NO A01-1238-08 A63-0116-08 B31-0760-08 B31-0761-08	NAME & DESCRIPTION COVER FRONT PANEL METER: VOLT METER: CURRENT
	$\begin{array}{c} 840-2737-24 \\ 842-3731-08 \\ 842-3738-08 \\ 842-6045-08 \\ 842-6045-08 \\ 842-6047-08 \\ 842-6047-08 \\ 842-6048-08 \\ 842-60173-00 \\ 863-0173-00 \\ 63-0174-00 \\ E21-0670-03 \end{array}$	SERIAL NO. PLATE  MASTER/SLAVE LABEL  FUSE RATING LABEL  RATING; AC100V 50/60HZ 170W  RATING; AC120V 50/60HZ 170W  RATING; AC220V 50/60HZ 170W  RATING; AC220V 50/60HZ 170W  RATING; AC240V 50/60HZ 170W  RATING; AC210V 60HZ 170W  RATING; AC110V 60HZ 170W  INSTRUCTION MANUAL; JAPANESE  INSTRUCTION MANUAL; FNGLISH  TERMINAL, RED
	E 2 1 - 0 6 7 1 - 0 3 E 2 1 - 0 6 7 2 - 0 3 E 2 9 - 0 5 0 6 - 0 4 E 2 9 - 0 5 4 2 - 0 8 E 3 0 - 0 0 2 7 - 3 5 E 3 0 - 0 5 7 1 - 1 5 E 3 0 - 1 8 1 5 - 0 5	TERMINAL, BLACK TERMINAL, WHITE SHORTING BAR LUG: M3 UL/CSA POWER CORD JIS POWER CORD SAA POWER CORD CEE POWER CORD
	$\begin{array}{c} E \ 3 \ 0 - 1 \ 8 \ 6 \ 7 \ 0 \ 5 \\ F \ 0 \ 1 - 0 \ 8 \ 8 \ 6 - 0 \ 8 \\ F \ 0 \ 5 - 3 \ 0 \ 2 \ 2 - 0 \ 5 \\ F \ 2 \ 9 - 0 \ 5 \ 1 \ 7 - 0 \ 8 \\ F \ 2 \ 9 - 0 \ 5 \ 1 \ 8 - 0 \ 8 \\ F \ 5 \ 0 - 0 \ 0 \ 0 \ 4 - 0 \ 8 \\ F \ 5 \ 1 - 0 \ 0 \ 1 \ 0 - 0 \ 8 \\ H \ 1 \ 0 - 2 \ 8 \ 5 \ 6 - 0 \ 8 \\ H \ 1 \ 0 - 2 \ 8 \ 5 \ 7 - 0 \ 8 \\ H \ 2 \ 0 - 1 \ 7 \ 3 \ 4 - 0 \ 8 \\ \end{array}$	BS POWER CORD  HEAT SINK  FUSE(6X32MM) 3A/250V  INSULATOR; FOR Q6/Q11  INSULATOR; FOR Q11A/Q11B/Q11C  FUSE(5X20MM) 3A/250V  FUSE(6X30MM) 5A/125V  FOAMED STYRENE PAD (FRONT)  FOAMED STYRENE PAD (REAR)  VINYL COVER
	$\begin{array}{c} \mathrm{H}5.3-0.115-0.8\\ \mathrm{J}0.2-0.529-0.8\\ \mathrm{J}1.9-16.71-0.8\\ \mathrm{J}1.9-16.72-0.8\\ \mathrm{J}2.1-4.72.0-0.8\\ \mathrm{J}2.1-4.75.8-0.8\\ \mathrm{J}2.1-4.75.8-0.8\\ \mathrm{J}3.0-0.63.5-0.8\\ \mathrm{J}3.0-0.63.5-0.8\\ \mathrm{J}3.0-0.63.5-0.5\\ \mathrm{J}4.2-0.0.85-0.5\\ \mathrm{K}0.1-0.41.7-0.5\\ \end{array}$	CARTON BOX FOOT CLAMPER: FOR 2-CORE AC CORD CLAMPER: FOR 3-CORE AC CORD BRACKET: FOR P.C.B BRACKET: FOR AC CORD BUSHING VOLUME SPACER: FOR VRO1 BUSHING: FOR 2-CORE AC CORD BUSHING: FOR 3-CORE AC CORD HANDLE
	$\begin{array}{c} \text{K 2 1} - 0\ 9\ 0\ 7 - 1\ 4\\ \text{K 2 1} - 0\ 9\ 1\ 1\ - 0\ 4\\ \text{K 2 2} - 3\ 0\ 0\ 6 - 0\ 4\\ \text{K 2 7} - 0\ 5\ 0\ 9 - 0\ 4\\ \text{L } 0\ 7 - 1\ 5\ 2\ 0\ - 0\ 8\\ \text{N 0 9} - 0\ 7\ 1\ 8 - 0\ 5\\ \text{N 0 9} - 0\ 7\ 7\ 6 - 0\ 5\\ \text{N 0 9} - 0\ 7\ 7\ 6 - 0\ 5\\ \text{N 0 9} - 0\ 7\ 7\ 7 - 0\ 5\\ \text{N 0 9} - 0\ 7\ 7\ 7 - 0\ 5\\ \text{N 0 9} - 0\ 7\ 7\ 7 - 0\ 5\\ \text{N 0 9} - 0\ 7\ 7\ 7 - 0\ 5\\ \text{N 0 9} - 0\ 7\ 7\ 7 - 0\ 5\\ \text{N 0 9} - 0\ 7\ 7\ 7 - 0\ 5\\ \text{N 0 9} - 0\ 7\ 7\ 7 - 0\ 5\\ \text{N 0 9} - 0\ 7\ 7\ 7 - 0\ 5\\ \text{N 0 9} - 0\ 7\ 7\ 7 - 0\ 5\\ \text{N 0 9} - 0\ 7\ 9\ 7 - 0\ 8\\ \text{N 1 1 0} - 0\ 4\ 0\ 4\ 0\ 4\ 0\ 4\\ \end{array}$	KNOB KNOB: FINE/CURRENT KNOB, OUTPUT PUSH BUTTON, ORANGE; POWER POWER TRANSFORMER SCREW, SEMS PAN HD M3X6 SCREW, SEMS BINDING TAPTITE 31 SCREW, SEMS PAN HD M3X10 SCREW, SEMS PAN HD M3X10 SCREW, SEMS PAN HD M3X10 SCREW, SEMS TAPTITE 3X10 FLANGE NUT M3
V R O 1 V R O 2 V R O 3	N 1 4 - 0 4 0 4 - 0 4 N 8 9 - 3 0 0 6 - 4 1 N 8 9 - 3 0 1 2 - 4 1 S 4 0 - 2 5 3 3 - 0 8 W 0 2 - 2 2 7 1 - 0 8 R 2 9 - 3 5 0 3 - 0 8 R 2 9 - 3 5 0 4 - 0 8	SCREW, BINDING TAPTITE 3X6 SCREW, BINDING TAPTITE 3X12 PUSH SWITCH: POWER AMP UNIT VOLUME 10K VOLUME 1K VOLUME 10K

	PR36	6-3A AMP UNIT	REF. N	NO PARTS NO	NAME & DESC	RIPTIO	N ·	
W02-2271-08				2 S C 1 8 1 5 ( G R ) 2 S C 1 8 1 5 ( G R ) 2 S C 1 8 1 5 ( G R )	TR. SI, NPN TR. SI, NPN TR. SI, NPN			
REF. NO	PARTS NO E 2 1 - 0 6 7 4 - 0 8 E 4 0 - 7 1 4 1 - 0 8 E 4 0 - 7 1 4 2 - 0 8 J 1 3 - 0 5 1 8 - 0 8 J 7 3 - 0 3 2 6 - 0 8	NAME & DESCRIPTION EXTERNAL OUTPUT TERMINAL PIN CONNECTOR 2P(L'INE VOLTAGE) PIN CONNECTOR 1P(LINE VOLTAGE) FUSE CLIP; FOR 6X30MM PCB (UNMOUNTED)	Q 6 Q 7 Q 8 Q 9 Q 1 0 Q 1 1	2 S D 1 1 4 8 (0) 2 S C 2 2 3 8 (Y) 2 S C 3 4 2 1 (Y) 2 S C 1 8 1 5 (G R) 2 S C 1 8 1 5 (G R) 2 S D 1 1 4 8 (0)	TR. SI, NPN			
C 1 C 2 C 3 C 4	R 9 2 - 0 1 5 0 - 0 5 R 9 2 - 1 0 6 1 - 0 5 C 9 0 - 3 0 1 9 - 0 8 C 9 0 2 M 1 H 1 0 2 K C 9 1 - 2 5 5 9 - 0 8 C 9 2 M 1 H 4 7 2 K	JUMPING RES. ZERO OHM(10MM) JUMPING RES. ZERO OHM (5MM) CAP. ELECTRO 1000 105°C 35V CAP. NYLAR 1000P 10% 50V CAP. CERAMIC 0.1 0.25P 50V CAP. MYLAR 4700P 10% 50V	Q15 Q16 Q17 Q11A Q11B	2511148(0)	TR. SI, NPN TR. DIGITAL TR. SI, NPN TR. SI, NPN			
C 5 C 6 C 7 C 8 C 9	C Q 9 2 M 1 H 1 O 3 K N O U S E C 9 O - 3 O 2 O - 0 8 C F 9 3 A N 2 E R 2 2 K N O U S E	CAP. FLECTRO 100 105 C 25V CAP. POLYESTER 0.22P 10% 250V	Q 1 1 C R 1 R 2	2 S D I I 4 8 ( 0 )  R D I 4 B B 2 C I 2 2 J  R D I 4 B B 2 C I 2 3 J	TR. SI, NPN RES. CARBON RES. CARBON	1 . 2 K 1 2 K	5 % 5 %	1/6W 1/6W
C 1 0 C 1 1	C 9 0 - 3 0 4 2 - 0 8 C F 9 3 A N 1 J R 2 2 K	CAP. ELECTRO 2200 105°C 63V CAP. POLYESTER 0.22P 10% 63V	R 2 R 3	R D 1 4 D B 2 H 3 O 2 J R D 1 4 B B 2 C 3 O 2 J	RES. CARBON RES. CARBON	3 K 3 K	5 % 5 %	1 / 2 W 1 / 6 W
C 2 2 C 2 6 C 2 7 C 2 8 C 2 9	C 9 1 - 2 5 5 9 - 0 8  C 9 0 - 3 1 7 4 - 0 8  N 0 U S E  C 9 0 - 3 0 2 0 - 0 8  C 9 1 - 2 5 5 9 - 0 8	CAP. CERAMIC 0.1 0.25P 50V  CAP. ELECTRO 10 1% 50V  CAP. FLECTRO 100 105°C 25V  CAP. CERAMIC 0.1 0.25P 50V	R 4 R 5 R 6 R 7 R 8 R 9	R D 1 4 B B 2 C 5 1 0 J R D 1 4 B B 2 C 1 2 3 J R D 1 4 B B 2 C 2 7 3 J R N 1 4 B K 2 C 2 4 0 1 F R D 1 4 B B 2 C 2 0 2 J R D 1 4 B B 2 C 1 0 2 J R D 1 4 B B 2 C 3 0 2 J	RES. CARBON RES. CARBON RES. CARBON RES. METAL FILI RES. CARBON RES. CARBON RES. CARBON	5 1 1 2 K 2 7 K 1 2 . 4 K 2 K 1 K 3 K	5 % 5 % 5 % 5 % 5 % 5 % 5 % 5 % 5 % 5 %	1/6W 1/6W 1/6W 1/6W 1/6W 1/6W
C 3 2	C F 9 3 A N I J 1 R O K	CAP. POLYESTER 1P 10% 63V	R 1 1 R 1 2 R 1 3	R D 1 4 B B 2 C 5 1 3 J N O U S E R D 1 4 B B 2 C 2 O 2 J	RES. CARBON RES. CARBON	5 1 K 2 K	5 % 5 %	1/6W
C N 1 C N 2 C N 3 C N 4	E 4 0 - 7 2 1 8 - 0 8 E 4 0 - 7 3 4 4 - 0 8 N O USE E 4 0 - 7 1 2 6 - 0 8	PIN CONNECTOR 2P PIN CONNECTOR 3P PIN CONNECTOR 2P	R 1 4 R 1 5 R 1 6 R 1 7	R D I 4 B B 2 C I 5 2 J R D I 4 B B 2 C I 0 2 J R D I 4 B B 2 C 5 I 2 J N O U S E	RES. CARBON RES. CARBON RES. CARBON	1.5 K 1 K 5.1 K	5 % 5 % 5 %	1/6W 1/6W 1/6W 1/6W
C N 5 C N 6 C N 7 C N 8	E 4 0 - 7 2 1 9 - 0 8 E 4 0 - 7 2 1 9 - 0 8 E 4 0 - 7 2 2 9 - 0 8 E 4 0 - 7 2 2 9 - 0 8 E 4 0 - 7 3 3 2 - 0 8	PIN CONNECTOR 3P PIN CONNECTOR 3P PIN CONNECTOR 4P PIN CONNECTOR 4P	R 1 8 R 1 9 R 2 0 R 2 1 R 2 2	R D 1 4 B B 2 C 5 1 3 J R D 1 4 B B 2 C 1 0 3 J R D 1 4 B B 2 C 1 0 2 J R N 1 4 B K 2 C 3 3 0 3 F R D 1 4 B B 2 C 1 0 2 J	RES. CARBON RES. CARBON RES. CARBON RES. METAL FILM RES. CARBON	1 K	5 % 5 % 1 % 5 %	1/6W 1/6W 1/6W 1/6W 1/6W
C N 1 2 C N 1 3	E 4 0 - 7 3 3 3 - 0 8 E 4 0 - 7 3 3 3 - 0 8	PIN CONNECTOR 2P PIN CONNECTOR 2P	R 2 3 R 2 4 R 2 7	R N 1 4 B K 2 C 9 1 0 2 F R N 1 4 B K 2 C 3 0 0 1 F	RES. METAL FILM	3 K	1 %	1/6W F/6W
C N 1 8	E 4 0 - 7 4 4 0 - 0 8	CONNECTOR	R 2 8 R 2 9	R D 1 4 B B 2 C 1 O 2 J R D 1 4 B B 2 C 1 O 3 J R S 1 4 G B 3 D 3 9 2 J	RES. CARBON RES. CARBON RES. METAL FILM	1 K 1 O K 3 . 9 K	5 % 5 % 5 %	1/6W 1/6W 2W
C N 2 3 C N 2 4	E 4 0 - 3 2 4 0 - 0 5 E 4 0 - 7 3 3 3 - 0 8	PIN CONNECTOR 5P PIN CONNECTOR 2P	R 3 0 R 3 1 R 3 2	RS14GB3AR51J NO USE	RES. METAL FILM	0.51	5 %	1 W
C 0 1	C 9 0 - 3 0 1 8 - 0 8	CAP. ELECTRO 1 105°C 50V	R 3 3 R 3 4	R S J 4 G B 3 A R 5 1 J N O U S E R D I 4 B B 2 C I 2 2 J	RES. METAL FILM	0.51 1.2K	5 % 5 %	1 W 1 / 6 W
C 0 1 C 0 2 C 0 3	C 9 1 - 1 3 2 3 - 0 8 N O U S E C 9 0 - 3 0 4 6 - 0 8	CAP. CERANIC 0.1 20% 250V  CAP. ELECTRO 100 105°C 50V	R 3 5 R 3 6 R 3 7 R 3 8	R D 1 4 B B 2 C 1 2 3 J R D 1 4 B B 2 C 3 O 2 J R D 1 4 B B 2 C 5 1 O J R D 1 4 B B 2 C 3 3 3 J	RES. CARBON RES. CARBON RES. CARBON RES. CARBON	1 2 K 3 K 5 1 3 3 K	5 % 5 % 5 %	1/6W 1/6W 1/6W 1/6W
D 1 D 2 D 3	1 B 4 B 4 2 E R A 1 5 - 0 1 1 S S 2 7 0 A	DIODE, STACK DIODE DIODE	R 3 9 R 4 0	R D 1 4 B B 2 C 2 7 3 J R N 1 4 B K 2 C 5 1 R O F	RES. CARBON RES. METAL FILM	27K 51.0	5 % 1 %	1/6W 1/6W
D 4 D 5 D 6 D 7	1 S S 2 7 0 A 1 S S 2 7 0 A 1 S S 2 7 0 A 1 S S 2 7 0 A	D 1 O D E D 1 O D E D 1 O D E D 1 O D E	R 4 3 R 4 4 R 4 5	R D 1 4 B B 2 C 1 O 3 J R D 1 4 B B 2 C 1 O 1 J R D 1 4 D B 2 II 8 2 2 J	RES. CARBON RES. CARBON RES. CARBON	1 0 K 1 0 0 8 . 2 K	5 % 5 % 5 %	1 / 6 W 1 / 6 W 1 / 2 W
D 8	NO USE DIOXB40	DIODE, STACK	R 6 7	R S I 4 G B 3 D R 1 5 J	RES. METAL FILM	0.15	5 %	2 W
D 1 0 D 1 4 D 1 5	ERA15-01  1 SS 2 7 0 A 1 SS 2 7 0 A	DIODE DIODE DIODE	R 7 4 R 7 5 R 7 6 R 7 7	R D 1 4 B B 2 C 1 0 2 J R D 1 4 D B 2 H 8 2 2 J R D 1 4 B B 2 C 1 0 2 J N O USE	RES. CARBON RES. CARBON RES. CARBON	1 K 8 . 2 K 1 K	5 % 5 % 5 %	1 / 6 W 1 / 2 W 1 / 6 W
D 1 6	1 S S 2 7 0 A	DIODE	R 7 8 R 7 9	R D 1 4 B B 2 C 1 0 2 J R D 1 4 D B 2 II 1 0 2 J	RES. CARBON RES. CARBON	1 K 1 K	5 % 5 %	1 / 6 W 1 / 2 W
D 3 3	ERA15-01	DIODE	R 8 5	R D I 4 D B 2 H 1 O I J	RES. CARBON	100	5 %	1 / 2 W
D 3 4 D 3 7 D 3 8 D 3 9	E R A 1 5 - 0 1 1 S S 2 7 0 A E R A 1 5 - 0 1	D I O D E D I O D E D I O D E D I O D E	R 8 8 R 8 9 R 9 0 R 9 1	R D 1 4 B B 2 C 1 0 4 J N O U S E R D 1 4 B B 2 C 1 0 2 J R D 1 4 B B 2 C 1 0 3 J	RES. CARBON RES. CARBON RES. CARBON	1 0 0 K 1 K 1 0 K	5 % 5 %	1/6W 1/6W 1/6W
D O 1	3 0 D 1	DIODE	R 9 2 R 9 3 R 9 4	R D 1 4 B B 2 C 1 O 2 J R D 1 4 B B 2 C 2 O 5 J R D 1 4 B B 2 C 5 1 O J	RES. CARBON RES. CARBON RES. CARBON	1 K 2 N 5 1	5 % 5 %	1/6W 1/6W
I C 1	WPC1510	IC, OP AMP	R 9 5 R 9 6	NO USE RD14BB2C912J	RES. CARBON	9.1K	5 % 5 %	1/6W
I C 2 I C 3	UPC151C - UPC1093J	IC,OP AMP IC,VARIABLE SHUNT REGULATOR IC,TERMINAL FIXED VOLTAGE REG.	R 3 2 A R 3 2 B	R S 1 4 G B 3 A R 5 1 J R S 1 4 G B 3 A R 5 1 J	RES. METAL FILM RES. METAL FILM	0.51 0.51	5 % 5 %	1 W
LEDI	I. N 3 2 2 G P	LED: GREEN	R 3 2 C	R S 1 4 G B 3 A R 5 1 J R N 1 4 B K 2 C 1 O O 3 F	RES. METAL FILM		5 %·	1 W
LED2 LEDO	L N 2 2 2 R P L N 2 2 2 R P L N 2 2 2 R P	LED; RED LED; RED LED; RED	R Y 1 R Y 2	S 7 6 - 0 6 0 4 - 0,8 S 7 6 - 0 6 0 4 - 0 8	R E L A Y R E L A Y	100K	1 %	1 / 6 W
Q 1 Q 2	2 S C 1 8 15 ( G R ) 2 S C 1 8 15 ( G R )	TR. SI, NPN TR. SI, NPN	RY3 RY4	S 7 6 - 0 6 0 4 - 0 8 S 7 6 - 0 6 0 4 - 0 8	R E L A Y R E L A Y			

# **PARTS LIST**

NAME & DESCRIPTION OUTPUT SW MASTER/SLAVE SWITCH

RES. SEMI FIXED 1KB RES. SEMI FIXED 100KB RES. SEMI FIXED 100

DIODE, ZENER 5.75 V

	PR70-1A
	Y86-1900-00
REF. NO PARTS NO A 0 1 - 1 2 3 7 - 0 8 A 6 3 - 0 1 1 7 - 0 8 B 3 1 - 0 7 6 1 - 0 8 B 3 1 - 0 7 6 2 - 0 8 B 4 0 - 2 7 3 7 - 2 4 B 4 2 - 3 7 3 1 - 0 8 B 4 2 - 3 7 3 3 - 0 8 B 4 2 - 6 0 5 0 - 0 8 B 4 2 - 6 0 5 1 - 0 8 B 4 2 - 6 0 5 1 - 0 8 B 4 2 - 6 0 5 3 - 0 8 B 4 2 - 6 0 5 3 - 0 8 B 4 2 - 6 0 5 1 - 0 8 B 4 2 - 6 0 5 3 - 0 8 B 4 2 - 6 0 5 3 - 0 8 B 4 2 - 6 0 5 3 - 0 8 B 4 2 - 6 0 5 3 - 0 8 B 6 3 - 0 1 7 3 - 0 0 B 6 3 - 0 1 7 4 - 0 0 B 2 1 - 0 6 7 0 - 0 3 E 2 1 - 0 6 7 1 - 0 3 E 2 1 - 0 6 7 1 - 0 3 E 2 1 - 0 6 7 0 - 0 3 E 2 1 - 0 6 7 0 - 0 3 E 2 1 - 0 6 7 0 - 0 3 E 2 1 - 0 6 7 0 - 0 5 6 - 0 4 E 2 9 - 0 5 0 6 - 0 4 E 2 9 - 0 5 0 6 - 0 4 E 2 9 - 0 5 0 6 - 0 4	FRONT PANEL METER: VOLT SERIAL NO. PLATE MASTER/SLAVE LABEL FUSE RATING LABEL RATING: AC100V 50/60HZ 110W RATING: AC120V 50/60HZ 110W RATING: AC220V 50/60HZ 110W RATING: AC220V 50/60HZ 110W RATING: AC220V 50/60HZ 110W RATING: AC220V 50/60HZ 110W RATING: AC120V 60HZ 110W RATING: AC210V 60HZ 110W RATING: AC210V 60HZ 110W RATING: AC120V 60HZ 110W RATING: AC240V 60HZ 110W
E 3 0 - 0 0 2 7 - 3 5 E 3 0 - 0 0 2 7 - 3 5 E 3 0 - 0 5 4 5 - 0 5 E 3 0 - 0 5 7 1 - 1 5 E 3 0 - 1 8 1 5 - 0 5 E 3 0 - 1 8 6 7 - 0 5 F 0 1 - 0 8 8 5 - 0 8	UL/CSA POWER CORD JIS POWER CORD SAA POWER CORD
F 0 5 - 2 0 2 1 - 0 8 F 0 5 - 2 0 2 3 - 0 5 F 2 9 - 0 5 1 7 - 0 8 F 2 9 - 0 5 1 8 - 0 8 F 2 9 - 0 5 1 8 - 0 8 H 1 0 - 2 8 5 3 - 0 8 H 2 0 - 1 7 3 4 - 0 8 H 5 3 - 0 1 1 6 - 0 8 J 5 2 - 0 5 2 9 - 0 8	FUSE(5X20MM) 2A/250V FUSE(6X32MM) 2A/250V INSULATOR:FOR Q6/Q11 INSULATOR:FOR Q11A/Q11B/Q11C FUSE(6X30MM) 3A/125V
J 1 9 - 1 6 7 1 - 0 8 J 1 9 - 1 6 7 2 - 0 8 J 2 1 - 47 2 0 - 0 8 J 2 1 - 47 5 8 - 0 8 J 2 9 - 0 5 1 9 - 0 8 J 3 0 - 0 6 3 5 - 0 8 J 4 2 - 0 0 8 3 - 0 5 J 4 2 - 0 0 8 5 - 0 5 K 0 i - 0 4 1 7 - 0 5	CLAMPER; FOR 2-CORE AC CORD
K 2 I - 0 9 0 7 - 1 4 K 2 I - 0 9 1 I - 0 4 K 2 4 - 3 0 0 6 - 0 4 K 2 7 - 0 5 0 9 - 0 4 I. 0 7 - 1 5 2 I - 0 8 N 0 9 - 0 7 1 8 - 0 5 N 0 9 - 0 7 5 7 - 0 5 N 0 9 - 0 7 7 7 6 - 0 5 N 0 9 - 0 7 7 7 - 0 5 N 0 9 - 0 7 9 8 9 - 0 5 N 0 9 - 0 7 9 7 0 8 N 1 4 - 0 4 0 4 - 0 4 N 8 9 - 3 0 0 6 - 4 1	KNOB; FINE/CURRENT KNOB, OUTPUT PUSH BUTTON, OR ANGE; POWER POWER TRANSFORMER SCREW, SEMS PAN HD M3X6 SCREW, SEMS BINDING TAPTITE 3X6 SCREW, SEMS PAN HD M3X10 SCREW, SEMS PAN HD M4X6 SCREW, SEMS PAN HD M3X10 SCREW, SEMS PAN HD M3X10 SCREW, SEMS TAPTITE 3X10 FLANGE NUT SCREW, BINDING TAPTITE 3X6
N 8 9 - 3 0 1 2 - 4 1 S 4 0 - 2 5 3 3 - 0 8 W 0 2 - 2 2 7 2 - 0 8 V R 0 1 R 2 9 - 3 5 0 3 - 0 8 V R 0 2 R 2 9 - 1 5 0 8 - 0 8 V R 0 3 R 2 9 - 3 5 0 4 - 0 8	SCREW, BINDING TAPTITE 3X12 PUSH SWITCH; POWER AMP UNIT VOLUME 10K VOLUME 1K VOLUME 10K

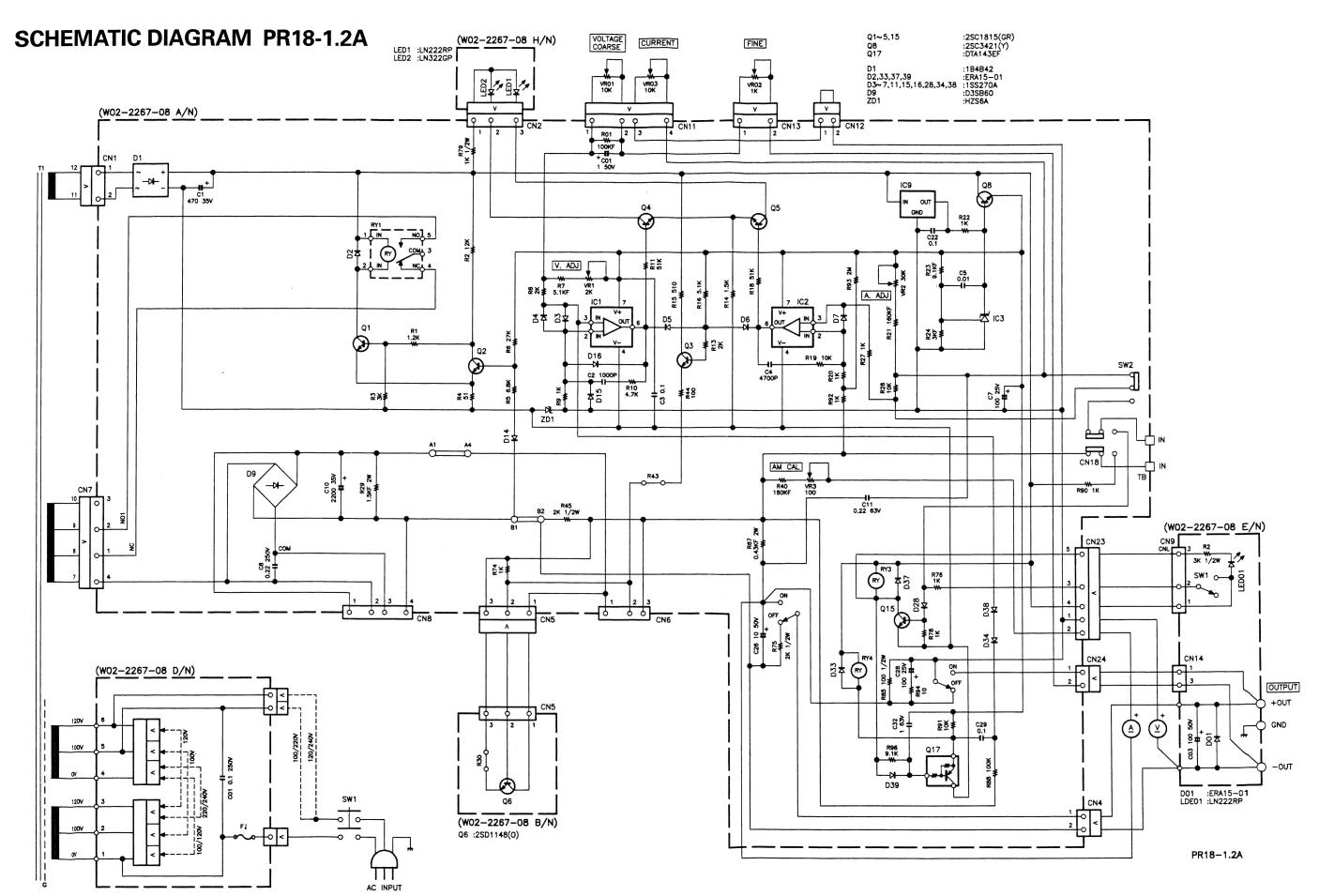
V R 1 R 1 2 - 1 5 6 4 - 0 8 V R 2 R 1 2 - 5 5 4 7 - 0 8 V R 3 R 1 2 - 0 5 9 7 - 0 8

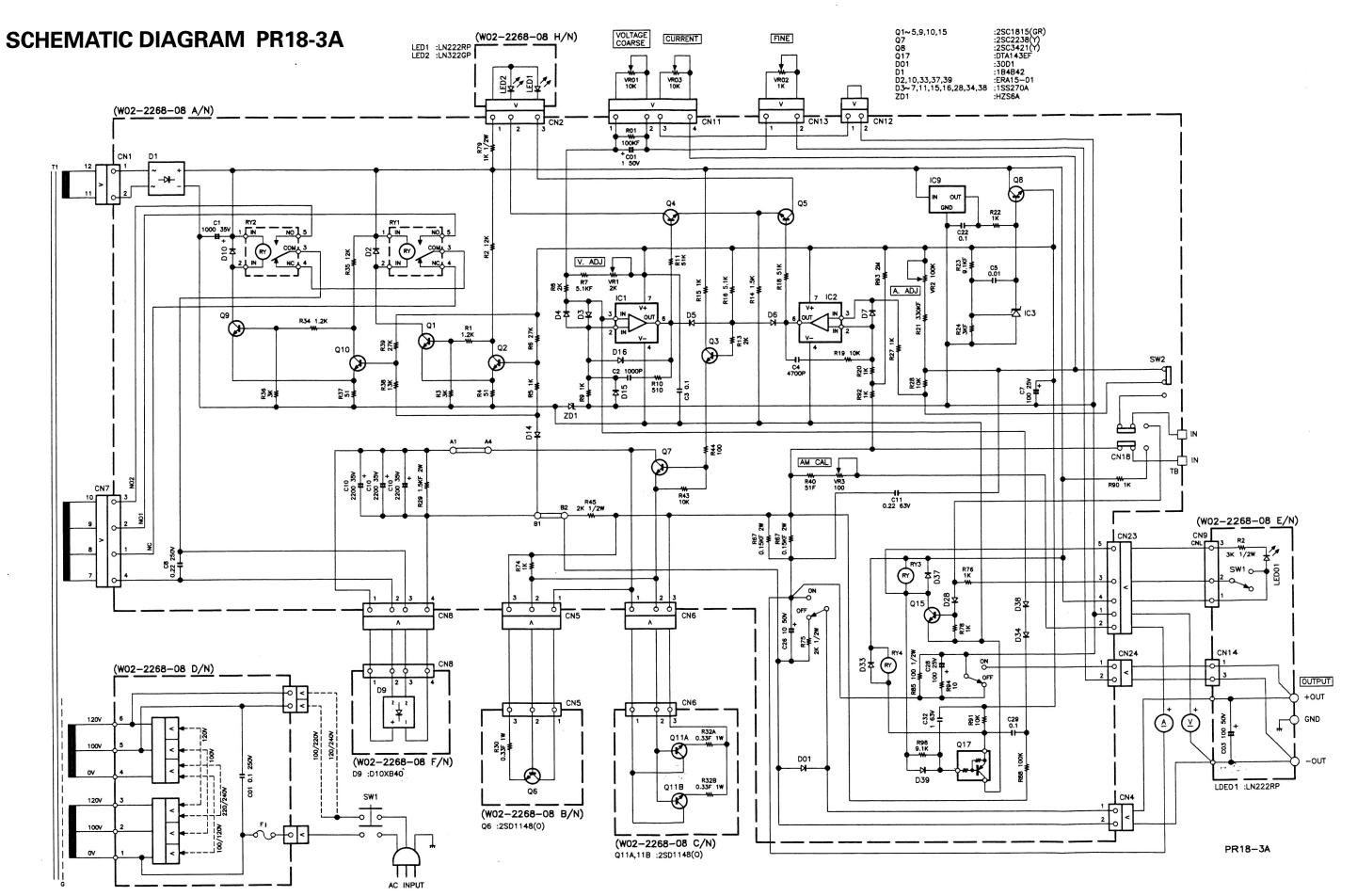
Z D 1 H Z S 6 A

# PARTS LIST PARTS LIST

13

PR70-1A AMP UNIT			REF.NO PARTS NO NAME & DESCRIPTION .		REF. NO PARTS NO NAME & DESCR RY4 S76-0630-08 RELAY		
REF. NO	PARTS NO E21-0674-08 E40-7141-08 E40-7142-08 J13-0518-08 J73-0326-08	VO2-2272-08  NAME & DESCRIPTION EXTERNAL OUTPUT TERMINAL PIN CONNECTOR 2P(LINE VOLTAGE) PIN CONNECTOR IP(LINE VOLTAGE) FUSE CLIP; FOR 6X30MM PCB (UNMOUNTED)	Q 2 Q 3 Q 4 Q 5 Q 6 Q 7 Q 8 Q 9	2 SC 1815 (GR) 2 SD 1148 (O) 2 SC 2 2 3 8 (Y) 2 SC 3 4 2 1 (Y) 2 SC 3 4 2 1 (Y)	TR. SI, NPN	S W 1 S 6 8 - 0 6 3 1 - 0 8 S W 2 S 3 1 - 1 5 1 2 - 0 8 V R 1 R 1 2 - 1 5 6 4 - 0 8 V R 2 R 1 2 - 5 5 4 7 - 0 8 V R 3 R 1 2 - 0 5 9 7 - 0 8 Z D 1 H 7 S 6 A	MASTER/SLAVE SWITCH RES. SEMI FIXED 1KB RES. SEMI FIXED 100KB RES. SEMI FIXED 100 DIODE, ZENER 5.75V
C 1 C 2 C 3 C 4 C 5	R 9 2 - 0 1 5 0 - 0 5 R 9 2 - 1 0 6 1 - 0 5 C 9 0 - 3 0 2 3 - 0 8 C Q 9 2 M 1 H 1 0 2 K C 9 1 - 2 5 5 9 - 0 8 C Q 9 2 M 1 H 4 7 2 K C Q 9 2 M 1 H 1 0 3 K	JUMPING RES. ZERO OHN (10 MM)  JUMPING RES. ZERO OHN (5 MM)  CAP. ELECTRO 470 105°C 35 V  CAP. MYLAR 1000P 10% 50 V  CAP. CERAMIC 0.1 0.25 P 50 V  CAP. MYLAR 4700P 10% 50 V  CAP. MYLAR 0.01 10% 50 V	Q10 Q11 Q15 Q16 Q17	2 S C 1 8 1 5 (G R) 2 S D 1 1 4 8 (O) 2 S C 1 8 1 5 (G R) NO USE DTA 1 4 3 E F	TR. SI, NPN TR. SI, NPN TR. SI, NPN TR. DIGITAL	2 D 1 H Z S 6 A	J100E, ZERZK 3.73
C 6 C 7 C 8 C 9	NO USE C90-3020-08 CF93AN2ER22K NO USE	CAP. ELECTRO 100 105°C 25V CAP. POLYESTER 0.22P 10% 250V	Q 1 1 A Q 1 1 B Q 1 1 C	2501148(0)	TR. SI, NPN TR. SI, NPN TR. SI, NPN		
C 1 0 C 1 1	C 9 0 - 3 0 3 9 - 0 8 C F 9 3 A N 1 J R 2 2 K	CAP. ELECTRO 330 105°C 160V CAP. POLYESTER 0.22P 10% 63V	R 1 R 2	R D I 4 B B 2 C 1 2 2 J R D I 4 B B 2 C 1 2 3 J	RES. CARBON 1.2K 5% 1/6W RES. CARBON 12K 5% 1/6W		
C 2 2 C 2 6 C 2 7 C 2 8 C 2 9 C 3 2	C91-2559-08  C90-4504-08  NO USE  C90-3020-08  C91-2559-08  CF93AN1J1R0K	CAP. CERAMIC 0.1 0.25P 50V  CAP. ELECTRO 10 100V  CAP. ELECTRO 100 105°C 25V  CAP. CERAMIC 0.1 0.25P 50V  CAP. POLYESTER 1P 10% 63V	R 2 R 3 R 4 R 5 R 6 R 7 R 8 R 9 R 1 0	R D 1 4 D B 2 H 3 0 2 J R D 1 4 B B 2 C 1 0 2 J R D 1 4 B B 2 C 5 1 0 2 J R D 1 4 B B 2 C 5 1 0 3 J R D 1 4 B B 2 C 2 7 3 J R N 1 4 B K 2 C 1 0 0 1 F R D 1 4 B B 2 C 2 0 2 J R D 1 4 B B 2 C 1 0 2 J R D 1 4 B B 2 C 2 4 3 J	RES. CARBON 3K 5% 1/2W RES. CARBON 1K 5% 1/6W RES. CARBON 51 5% 1/6W RES. CARBON 30K 5% 1/6W RES. CARBON 27K 5% 1/6W RES. METAL FILM 1K 1% 1/6W RES. CARBON 2K 5% 1/6W RES. CARBON 1K 5% 1/6W RES. CARBON 24K 5% 1/6W RES. CARBON 24K 5% 1/6W		
C 1 0 1 C N 1 C N 2 C N 3 C N 4 C N 5	C91-2588-08  E40-7218-08  E40-7344-08  NO USE  E40-7126-08  E40-7219-08	CAP. CERAMIC 0.1 10% 630V  PIN CONNECTOR 2P  PIN CONNECTOR 2P  PIN CONNECTOR 2P  PIN CONNECTOR 3P  PIN CONNECTOR 3P	R 1 1 R 1 2 R 1 3 R 1 4 R 1 5 R 1 6 R 1 7	R D 1 4 B B 2 C 5 1 3 J NO USE R D 1 4 B B 2 C 2 0 2 J R D 1 4 B B 2 C 1 5 2 J R D 1 4 B B 2 C 1 0 2 J R D 1 4 B B 2 C 5 1 2 J NO USE	RES. CARBON 51K 5% 1/6W  RES. CARBON 2K 5% 1/6W  RES. CARBON 1.5K 5% 1/6W  RES. CARBON 1K 5% 1/6W  RES. CARBON 5.1K 5% 1/6W		
C N 1 2 C N 1 3	E 4 0 - 7 2 1 9 - 0 8 E 4 0 - 7 2 2 9 - 0 8 E 4 0 - 7 3 3 2 - 0 8 E 4 0 - 7 3 3 3 - 0 8 E 4 0 - 7 3 3 3 - 0 8	PIN CONNECTOR 4P PIN CONNECTOR 4P PIN CONNECTOR 2P PIN CONNECTOR 2P	R 1 8 R 1 9 R 2 0 R 2 1 R 2 2 R 2 3 R 2 4	R D 1 4 B B 2 C 5 1 3 J R D 1 4 B B 2 C 1 0 3 J R D 1 4 B B 2 C 1 0 2 J R N 1 4 B K 2 C 3 9 0 3 F R D 1 4 B B 2 C 1 0 2 J R N 1 4 B K 2 C 3 9 1 0 1 F R N 1 4 B K 2 C 3 0 0 1 F	RES. CARBON 51K 5% 1/6W RES. CARBON 10K 5% 1/6W RES. CARBON 11K 5% 1/6W RES. METAL FILM 390K 1% 1/6W RES. CARBON 1K 5% 1/6W RES. CARBON 1K 5% 1/6W RES. METAL FILM 9.1K 1% 1/6W RES. METAL FILM 3K 1% 1/6W		
C N 2 3	E 4 0 - 7 4 4 0 - 0 8 E 4 0 - 3 2 4 0 - 0 5 E 4 0 - 7 3 3 3 - 0 8 C 9 0 - 3 0 3 8 - 0 8	CONNECTOR  PIN CONNECTOR 5P  PIN CONNECTOR 2P  CAP. ELECTRO 1 105°C 100V	R 2 7 R 2 8 R 2 9 R 3 0 R 3 1 R 3 2	R D I 4 B B 2 C I 0 2 J R D I 4 B B 2 C I 0 3 J R S I 4 G B 3 D I 2 3 J R S I 4 G B 3 A I R 5 J NO USE R S I 4 G B 3 A I R 5 J	RES. CARBON 1K 5% 1/6W RES. CARBON 10K 5% 1/6W RES. METAL FILM 12K 5% 2W RES. METAL FILM 1.5 5% 1W  RES. METAL FILM 1.5 5% 1W		
C 0 1 C 0 2 C 0 3 D 1 D 2 D 3	C91-1323-08 NO USE C90-3048-08 1B4B42 ERA15-01 1SS270A	CAP. CERAMIC 0.1 20% 250V  CAP. ELECTRO 100 105°C 100V  DIODE, STACK DIODE DIODE	R 3 3 R 3 4 R 3 5 R 3 6 R 3 7 R 3 8	NO USE RD14BB2C122J RD14BB2C123J RD14BB2C123J RD14BB2C102J RD14BB2C510J RD14BB2C753J RD14BB2C273J RD14BB2C2751F0F	RES. CARBON 1.2K 5% 1/6W RES. CARBON 12K 5% 1/6W RES. CARBON 1K 5% 1/6W RES. CARBON 51 5% 1/6W RES. CARBON 75K 5% 1/6W RES. CARBON 27K 5% 1/6W		
D 4 D 5 D 6 D 7 D 8 D 9 D 1 0	1 S S 2 7 0 A 1 S S 2 7 0 A 1 S S 2 7 0 A 1 S S 2 7 0 A NO USE D3 S B 6 0 ER A 1 5 - 0 1	DIODE DIODE DIODE DIODE, STACK DIODE	R 4 0 R 4 3 R 4 4 R 4 5	R D 1 4 B B 2 C 1 0 3 J R D 1 4 B B 2 C 1 0 1 J R D 1 4 D B 2 H 3 0 3 J R S 1 4 G B 3 D R 2 2 J	RES. METAL FILM 51.0 1% 1/6W  RES. CARBON 10K 5% 1/6W  RES. CARBON 100 5% 1/6W  RES. CARBON 30K 5% 1/2W  RES. METAL FILM 0.22 5% 2W		
D 1 4 D 1 5 D 1 6	1 S S 2 7 0 A 1 S S 2 7 0 A 1 S S 2 7 0 A	D 1 0 D E D 1 0 D E	R 7 4 R 7 5 R 7 6 R 7 7	R D 1 4 B B 2 C 1 O 2 J R D 1 4 D B 2 II 3 O 3 J R D 1 4 B B 2 C 1 O 2 J N O U S E	RES. CARBON 1K 5% 1/6W RES. CARBON 30K 5% 1/2W RES. CARBON 1K 5% 1/6W		
D 2 8	1 S S 2 7 0 A ER A 1 5 - 0 1	D I O D E	R 7 8 R 7 9	R D I 4 B B 2 C I O 2 J R D I 4 D B 2 H 1 O 2 J	RES. CARBON 1K 5% 1/6W RES. CARBON 1K 5% 1/2W		
D 3 4 D 3 7	S S 2 7 0 A ER A 1 5 - 0 1	DIODE	R 8 5	R D 1 4 D B 2 H 1 O 1 J  R D 1 4 B B 2 C 1 O 4 J	RES. CARBON 100 5% 1/2W RES. CARBON 100K 5% 1/6W		
D 3 8 D 3 9	1 S S 2 7 0 A ER A 1 5 - 0 1	DIODE DIODE	R 8 9 R 9 0 R 9 1	NO USE RD14BB2C102J RD14BB2C103J	RES. CARBON 1K 5% 1/6W RES. CARBON 10K 5% 1/6W		
D O 1 I C 1 I C 2 I C 3	ERA15-01  UPC151C  UPC151C  UPC1093J	DIODE IC,OP AMP IC,OP AMP IC,VARIABLE SHUNT REGULATOR		R D I 4 B B 2 C I 0 2 J R D I 4 B B 2 C 2 0 5 J R D I 4 B B 2 C I 0 I J N O USE R D I 4 B B 2 C 9 I 2 J R S I 4 G B 3 A I R 5 J	RES. CARBON 1K 5% 1/6W RES. CARBON 2M 5% 1/6W RES. CARBON 100 5% 1/6W RES. CARBON 9.1K 5% 1/6W RES. METAL FILM 1.5 5% 1W		
IC9 LEDI	A   7 8 L 1 2 A   N 2 2 2 R P	IC, TERMINAL FIXED VOLTAGE REG. LED: RED		R S I 4 G B 3 A I R 5 J R S I 4 G B 3 A I R 5 J	RES. METAL FILM 1.5 5% 1W RES. METAL FILM 1.5 5% 1W		
L E D 2 L E D 0	LN 3 2 2 G P LN 2 2 2 R P LN 2 2 2 R P	LED; GREEN LED; RED LED; RED	R O 1 R Y 1 R Y 2 R Y 3	R N 1 4 B K 2 C 1 0 0 3 F S 7 6 - 0 6 0 4 - 0 8 S 7 6 - 0 6 0 4 - 0 8 S 7 6 - 0 6 0 4 - 0 8	RES. METAL FILM 100K 1\$ 1/6W  RELAY RELAY RELAY		





# P.C. BOARD

